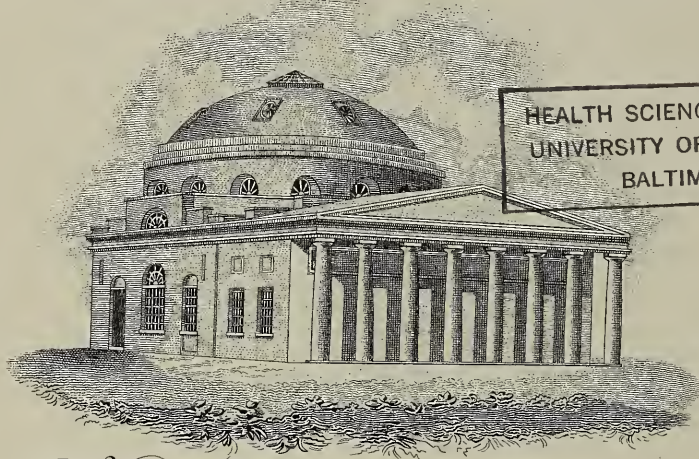






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# The Journal

of the

## Michigan State Medical Society

Published under the Direction  
of The Council

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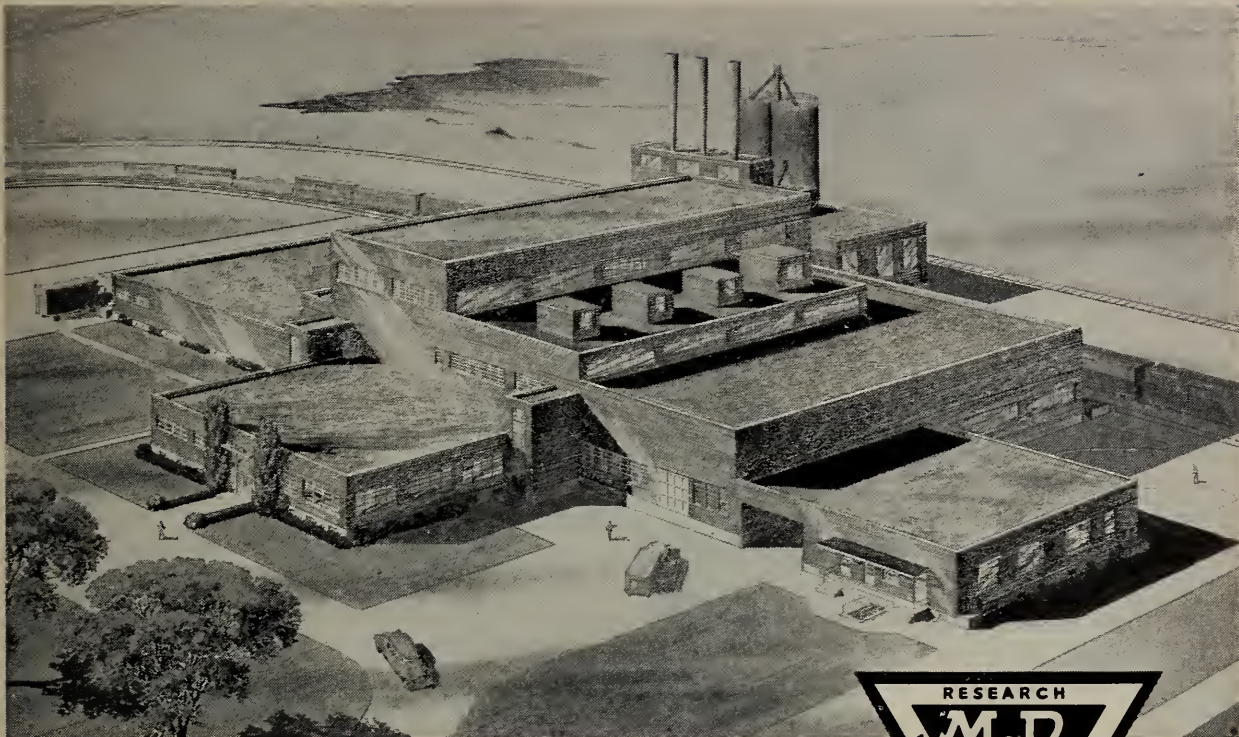
VOLUME 48  
1949

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# You and Your Business

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## HIGHLIGHTS OF EXECUTIVE COMMITTEE MEETINGS

November 10 and 21, 1948

- Monthly financial reports and bills payable were presented, studied, and approved.
- Matters for joint discussion with the AMA Delegates were considered in detail as follows:
  - (a) President Sladek's letter re government plan of action on socialized medicine.
  - (b) Dr. C. E. Umphrey's proposed resolution on need for action by AMA House of Delegates re integrated plan.
  - (c) MSMS Public Relations Committee's motion of November 7 re need for action by AMA House of Delegates, on national public relations program.
  - (d) 1948 MSMS House of Delegates resolution re formation of National Agency for Voluntary Health Service Plans.
  - (e) 1948 MSMS House of Delegates resolution supporting an increase in the number of medical graduates.
  - (f) 1948 MSMS House of Delegates resolution re proposed Veterans Administration Hospital in Ann Arbor.
  - (g) California resolutions re Veterans Administration non-service connected disability cases.
  - (h) Winston-Salem, North Carolina resolution re use of physicians in armed forces.
  - (i) Massachusetts Medical Society resolution re Veterans Administration encouraging medical education in foreign schools.
  - (j) Dr. W. A. R. Chapin's letter re staff appointment in hospitals to be based on ability rather than on Board certification.
  - (k) Kent County Medical Society (Michigan) action urging that the AMA establish adequate dues and develop an active positive public relations program executed by well qualified and experienced help.
  - (l) The Executive Committee of The Council requested the Delegates to ask the AMA to develop a categorical answer and statement, page by page, rebutting "The Nation's Health—a Ten-Year Program," the Ewing Report, and that this refutation be supplied to all state medical societies at the earliest possible date.
- Efforts to increase number of students graduated from medical schools; the Special Committee reported through Dr. Sladek that both deans of the two Michigan medical schools have been contacted, and that subsequently the Committee will correlate its findings and discuss the problems with Governor G. Mennen Williams and with the members of the two finance committees of the Michigan Legislature.
- Reports were accepted from the Sex Education Committee, meeting of October 21; the Legislative Committee, meeting of October 28; the Organizational Committee of the Michigan Heart Association, meeting of November 3; the Michigan Health Council, meeting of November 3; the Public Relations Committee, meeting of November 7.
- Michigan Health Council: Appreciating the value and necessity of having an active Michigan Health Council, the MSMS Executive Committee of The Council reaffirmed its contribution of \$7,500, payable as of January 1, 1949 without any restrictions, and requested that Michigan Medical Service join in the lifting of its restrictions, and the Executive Committee of The Council further expressed its hope that Michigan Hospital Service and other member-organizations will contribute, at an early date, in order to facilitate the important organizational work of the Michigan Health Council.
- The President appointed George C. Thosteson, M.D., Detroit, and Carl D. Camp, M.D., Ann Arbor, to the Committee on Geriatrics; E. I. Carr, M.D., Lansing, as MSMS representative to the Michigan Cancer Conference, Lansing, November 12; Robert J. Douglas, M.D., Muskegon, to the Legislative Committee; B. H. Van Leuven, M.D., to the Medical Advisory Committee of State Vocational Rehabilitation.

*(Continued on Page 10)*



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## HIGHLIGHTS OF EXECUTIVE COMMITTEE MEETINGS

(Continued from Page 8)

- Approved were the appointments to the Mediation Committee, made by President Sladek: W. Z. Rundles, M.D., Flint, Chairman; A. F. Bliesmer, M.D., St. Joseph; B. R. Corbus, M.D., Grand Rapids; V. H. Dumond, M.D., Bay City; W. B. Fillinger, M.D., Ovid; Fred W. Hyde, Sr., M.D., Detroit; E. T. Morden, M.D., Adrian; R. W. Teed, M.D., Ann Arbor; Arch Walls, M.D., Detroit, and H. B. Zemmer, M.D., Lapeer.
- The Executive Committee nominated to the State Hospital Survey and Construction Advisory Board, to represent MSMS, A. D. Allen, M.D., Bay City, and John R. Rodger, M.D., Bellaire.
- Income Tax—The General Counsel stated that while a postgraduate course is not deductible as business expense, the expense of attendance at professional conventions is deductible as business expense.
- C. E. Umphrey, M.D., Detroit, was appointed as MSMS representative to the Michigan Welfare Annual Conference, Detroit, December 6.
- Annual County Secretaries-Public Relations Conference. A special committee to develop the program of the Conference was appointed: L. Fernald Foster, M.D., Chairman, O. O. Beck, M.D., and H. W. Brenneman.
- "Lucky Junior," the MSMS movie, was shown in 46 theaters in October, as reported by Public Relations Counsel Brenneman.
- Farmers Week.—A doctor of medicine has been invited to speak on January 26, 1949 during Farmers Week ceremonies at Michigan State College, East Lansing: J. S. DeTar, M.D., Milan, Michigan's Foremost Family Physician, was the honored practitioner.

## MRS. MEYER'S ADDRESS

The recent address of Agnes E. (Mrs. Eugene) Meyers before the American Public Health Association in Boston reached a large audience when it was published in *The Washington Post* on November 14. It outlined a plan for achieving a sound but essentially non-controversial national health and medical care system. Mrs. Meyers writes off the "Utopian promises of compulsory national health insurance" and urges instead the strengthening of local health departments with

federal assistance, filling in of chinks in the Hill-Burton hospital expansion law, and, most important, all-out support of Blue Cross and Blue Shield by the medical profession to the end that membership rates are lowered and the maximum number of low-salaried workers are encouraged to join.

## HILL-BURTON HELP

Five hundred and forty Hill-Burton hospital projects were approved to December 6, 1948. More than one hundred of these projects—hospitals, hospital additions, health centers and auxiliary structures—are said to be actually under construction. The total estimated cost of the 540 is in excess of 301 million dollars of which the federal share will be approximately 92 million. All but 124 of the projects are new general hospitals or additions to present plans. Two-thirds of the prospective new general hospitals will be erected in towns of less than 5,000 population; only 15 are intended for cities of 50,000 or more.

## EXAMINATION OF INDUCTEES

The Armed Forces have the responsibility for the examination of inductees at the seven induction centers of Michigan, according to Colonel G. B. Arnold of Michigan Selective Service, Lansing.

Selective Service maintains a list of doctors of medicine who serve in an advisory capacity to aid Selective Service in the elimination of inductees with obvious defects. The medical advisors are the same doctors of medicine who were the local board examining physicians under the 1940 Selective Service Act. These doctors have a list of the obvious defects which they use when the Selective Service office sends to them an inductee who on the surface may not be eligible for service in the Armed Forces.

The list of medical advisors to local boards is more than ample to take care of the advisory work of the boards, according to Colonel Arnold.

## POSTGRADUATE FELLOWSHIPS

The National Foundation for Infantile Paralysis has announced a series of research fellowships available to doctors in the fields of research, physical medicine and public health.

Research fellowships are available in virology, orthopedic surgery, pediatrics, epidemiology, and neurology.

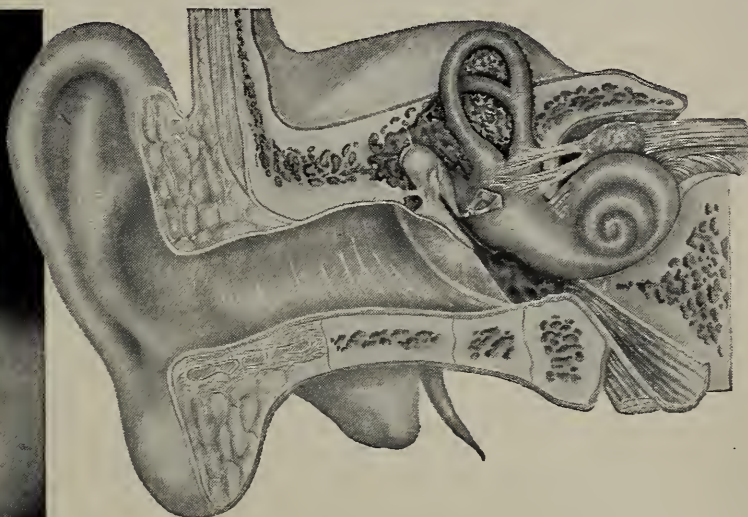
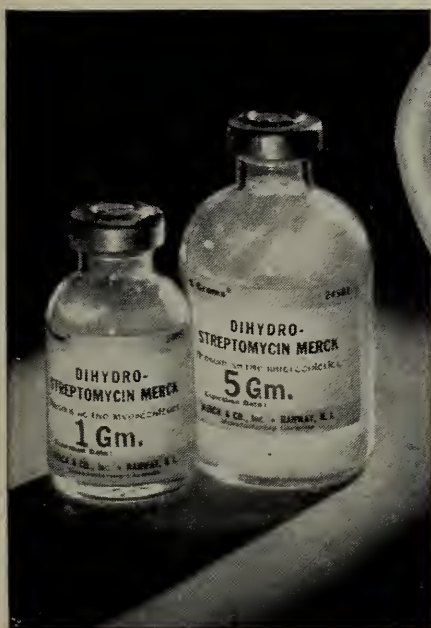
These fellowships are intended to emphasize (1) advanced training in the basic sciences as they apply to the particular specialty and to research, and (2) experi-

(Continued on Page 12)

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## POSTGRADUATE FELLOWSHIPS

(Continued from Page 10)

ence in research, which need not be immediately related to poliomyelitis.

**Eligibility Requirements.**—Doctor of Medicine (or when appropriate, a degree of Doctor of Philosophy); a minimum of two years of training on the residency level in the specialized field; presentation of an appropriate program of study and investigation; United States citizenship; sound health, as attested by a physical examination.

**Physical Medicine.**—Clinical fellowships are available to physicians who wish to prepare for eligibility for certification by the American Board of Physical Medicine.

**Eligibility Requirements.**—Graduation from a Class A school of medicine; completion of a rotating internship of not less than one year in a hospital approved by the Council on Medical Education and Hospitals of the American Medical Association; license to practice medicine in one or more states; citizenship in the United States; sound health, as attested by a physical examination; age limit: 40.

**Public Health.**—Fellowships are available to physicians for one year of postgraduate study leading to a Master of Public Health degree at a school of public health approved by the American Public Health Association.

**Eligibility Requirements.**—Graduation from a Class A school of medicine; completion of an internship of not less than one year in a hospital approved by the Council on Medical Education and Hospitals of the American Medical Association; license to practice medicine in one or more states; citizenship in the United States; sound health, as attested by a physical examination.

## RESEARCH FELLOWSHIPS IN THE FIELD OF POLIOMYELITIS AND RELATED DISORDERS

A limited number of research fellowships are available in virology, orthopedic surgery, pediatrics, epidemiology, and neurology.

These fellowships are intended to emphasize (1) advanced training in the basic sciences as they apply to the particular specialty and to research, and (2) experience in research, which need not be immediately related to poliomyelitis.

In accepting a fellowship, each recipient must agree to practice as a specialist in physical medicine in the United States or its territories for a minimum of two years following completion of three years of clinical study. Both are required to qualify for the Board examination.

Application may be made to the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York, at any time during the year. Selection of candidates will be made on a competitive basis by committees composed of specialists in each field. Awards are based on the individual need of each applicant.

## URGES DRAFT BOARDS TO DEFER MEDICAL STUDENTS

In a memorandum sent to all state directors for guidance of the 3,657 draft boards, Maj. Gen. Lewis B. Hershey, Selective Service Director in Washington, recom-

mended deferment of medical students to assure the nation an adequate supply of physicians, dentists and "other medical practitioners."

The policy, it was said, is designed to maintain the current level of graduates from the professional schools in medicine, dentistry, veterinary medicine and osteopathy. The policy affects 44,000 students in medical professional schools or in pre-professional schools.

Similar policies and procedures will be established for scientific students.

The deferment policies on medical and scientific students are entirely advisory and are not binding upon the local draft boards, which decide the deferments on the merits of each individual case.

## BLOOD STUDY GIVES CLEWS TO TWO OLD MYSTERIES

Two mysteries of science may have been partly solved by a blood study of Europe's most puzzling people, the Basques of Northern Spain, evidence presented to the International Society of Hematology here indicated. The mysteries are:

1. Where did the Basques, who have a strange language and culture, come from?
2. Will European races continue to have "incompatible" Rh positive and Rh negative blood?

Basques may be the purest descendants of a race that lived in Europe before the invasion of the Mongoloid hordes from Asia.

Blood study of 400 Basques has revealed that they are nearly a pure Rh negative group, Drs. A. E. Mourant, Elizabeth W. Ikin and J. M. Chalmers, of the Lister Institute, London, told the society here.

Their study was based on work done by Prof. J. B. S. Haldane, of England, and Dr. A. S. Wiener, New York.

European racial groups have an estimated mixture of 60 per cent Rh positive genes and 40 per cent Rh negative.

This division is believed to have occurred when Rh negative European peoples were invaded from Asia by an Rh positive race. Thus, the Rh negative Basques have probably inhabited Europe longer than the mixed or positive Rh people.

The Rh factor is involved in a disease-producing hereditary anemia in the newborn. Incompatibility of the blood groups between an Rh negative mother and an Rh positive father produces an Rh positive baby.


Just as antibodies form in the blood to kill disease germs, so the mother's antibodies injure the blood cells of the baby, often resulting in death.

This Rh complication is likely to continue in European races, the British scientists said. Neither the Rh positive nor the Rh negative genes have been wiped out in more than 10,000 years of mixing, their studies indicated.

Over a much longer period of time and by a very slow process, they theorize, it is possible that the rarer Rh negative may sometime disappear.


The Basques are a group of some 800,000 people living in the region of the western Pyrenees Mountains. It has been suggested that the mystery of the origin of the Basques might never be solved.—*Science News Letter*.

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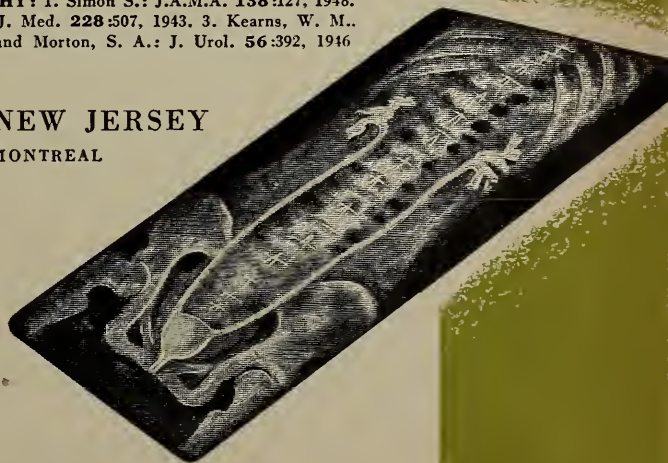
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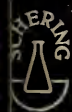
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# Cancer Comment

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## REMEMBER THE PROSTATE

With improved methods of diagnosis and treatment, cancer of the prostate becomes of increasing interest to the general practitioner. It vies with cancer of the lung as the second cause of death in men, second only to cancer of the digestive tract.

If every man more than forty-five years of age would have an annual examination of his prostate gland, many of these malignant growths would be found in earlier stages when, under competent therapy, a considerable increase in expectation of recovery could be attained. Like cancer elsewhere, the prostatic growth gives few signs of its presence until well advanced and usually only after metastases have taken place.

The obstructive symptoms of cancer of the prostate may be mistaken for those of benign prostatic hypertrophy; the irritative symptoms, for those of chronic prostatitis. A diminished forceless urinary stream with nocturia suggests hypertrophy, but in cancer the nocturia usually has been present for months instead of years when first seen. Urinary retention develops in at least 25 per cent of cases. Hematuria is rare, unless the growth has invaded the bladder wall or urethra.

Digital examination of the prostate by rectum should be done in these older men in an orderly and purposeful manner. One or more nodules of stony hardness in any portion of the prostate immediately suggests cancer, but prostatic calculus usually cannot be ruled out except with x-ray. A characteristic finding in cancer of the prostate is an obliteration of the median furrow and notch between the two lateral lobes. In benign prostatic hypertrophy, there is always a clearly defined line of demarcation in the posterior commissure and also between the prostate and surrounding tissue. In advanced carcinoma, the prostate is felt to be fixed, and its borders fuse with the seminal vesicles and lateral pelvic fascia. In earlier stages, there may be but one solitary nodule felt, and the gland may be freely moveable. It is then that the possibility for cure by radical perineal prostatectomy is good. The physician who has found such a condition and who therefore has the opportunity to refer his patient for such help should not fail him.

Contrary to earlier teaching, cancer of the prostate may occur along with benign hypertrophy. The serum acid phosphatase determination is not a great differential diagnostic aid, as it is usually not elevated unless rather extensive metastases have occurred. A normal serum acid phosphatase should be disregarded. Cystoscopy may be of considerable diagnostic value. Biopsy by transurethral resection may establish the diagnosis.

Even in those patients in whom the diagnosis has been made late, the prospect of some relief may be offered. This relief is often spectacular in those patients whose prostatic carcinoma is androgen dependent. The administration of diethylstilbestrol, which counteracts the stimulation of the prostatic cells by androgens, affords a measure of relief from the severe pain and seems to retard temporarily both the primary growth and its metastases. The same effect may be accomplished by bilateral orchiectomy, some of the objectionable features of which may be obviated by the intracapsular method which leaves the tunicae and epididymites remaining to occupy the scrotal sac.

Thus, today, the patient with prostatic carcinoma has a much more hopeful outlook than ever before. By careful examination in the absence of symptoms, cancer in early stages can often be found, and by the newer methods of treatment, either by endocrines or surgery, the patient will enjoy a much longer period of freedom from disability and suffering. The family physician can find many prostatic cancers if and when he carefully examines his male patients forty-five years of age and older. It is his responsibility to give that protection to all those seeking his services.

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We should remember the words of Hamilton Bailey who, commenting on the too frequent neglect of digital examination, said: "If you don't put your finger in it, you will put your foot in it."

Cancer is being licked slowly but surely—by doctors, not by "centers."

It is impossible to overemphasize the burden the family doctor must bear in any practical plan for cancer control.

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# Political Medicine

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## WAKE UP, AMERICA!

By William D. Stafford  
Detroit, Michigan

LET'S FACE the facts. Within the next two years, democracy in America may possibly take the first irretrievable step down the long and bitter road to self-destruction. This present Congress seems to be virtually committed to the passage of a bill which will kill our long cherished and highly beneficial system of private medical care. Federalized medicine, as it is now proposed, strikes deep at the heart of the ideals of freedom and progress.

By setting up a bureaucratic regime to administer the program, the bill would provide the impetus to the stifling of initiative on the part of the doctor, and confidence and trust on the part of the patient. Doctors would become subservient to the demands of a small army of some one-and-a-half million nonprofessional bureaucrats.<sup>1</sup>

When the system of compensation is based on a rigid, unalterable salary common to all classes of doctors, where is the initiative to become a skillful practitioner? When there is a common fee set for all diseases, why should a doctor take special pains for the welfare of any individual? The idea would be to see as many people as possible, thus cutting down actual service to the minimum. Gone would be the American tradition of the family doctor, the skilled and devoted servant of his patients. In his place would stand a cold, technical scientist, forced by the dictates of superiors, rather than by the dictates of his own heart and conscience, into a haphazard system of medical care. Doctors aren't materialistic; they wouldn't do so much charity work if they were. However, should we deny a human being a decent living, even if he should be a servant of mankind?

Government administration of a program also necessarily involves the keeping of written records. The knowledge that the intimate facts of his life are subject to review by some third party, if not by

the public in general, certainly does not increase one's confidence and ease in talking to his physician. Confidence in the integrity of a doctor is almost as important as confidence in his ability. Both of these ideals are likely to fly out the window when governmental regulation comes in the door.

Now, I am not saying that incompetency and indiscretion do not exist in the medical profession today. However, one has, at least, the right to choose his own physician, and the right to release that physician if conditions cause him to deem it necessary. No such right is guaranteed by even the most ardent advocate of socialized medicine. The competition of the unhampered private practice of medicine provides the best assurance of the maintenance of the high standard of perfection to be found in this noble profession.

All of these points deal, of course, with the all-important doctor-patient relationship; a relationship that is bound to suffer under federalized medicine. However, there are those who insist that, regardless of consequences, the average American cannot afford adequate medical care; and thus the government must step in.

Ability to pay does not seem to be, however, as important a factor as will to pay. Statistics computed in June of 1944, by no less an authority than the United States Department of Commerce, show that the yearly expenditure for the average American is eighteen dollars for tobacco, almost twenty-five for the upkeep of cars, just under thirty-nine for liquor, and eight dollars for medical care.

It is true that there are families in very low income brackets which must be aided. The private profession of medicine is taking rapid strides toward the solution of this social problem. Voluntary, pre-paid hospitalization and professional insurance plans now protect twenty-nine million Americans.<sup>2</sup>

More people are being covered every day. This

*(Continued on Page 18)*

2. Ibid, pp. 11, 16.

Written by the sixteen-year-old son of Dr. Frank Stafford, Dartmouth, 1952, for an English class.

1. Council on Medical Service, American Association. 1946. "Voluntary Health Insurance vs. Compulsory Health Insurance," p. 121; "Mortality Rates as an Index of Health," pp. 122, 123.





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**WAKE UP, AMERICA!***(Continued from Page 16)*

system is in accord with our democratic principles; and, most significantly, it works.

The American people enjoy a state of good health unequalled in the world today. At the same time that our varying climates, mixture of races, and automotive propensities have hindered progress, unhampered physicians and surgeons have forged ahead to conquer obstacles to physical and mental well-being.

Let us keep a system of medical care that not only preserves and extends such high standards of health, but does so without putting added strains on the tax-weary citizens. Let the American institution of the private practice of medicine stand as a bulwark against communism in a world that so pitifully needs such a bulwark.

**COMPULSORY NATIONAL HEALTH INSURANCE**

Recently Federal Security Administrator Oscar Ewing spoke before the convention of State and Territorial Health Officers in Washington on "The Job Ahead." Mr. Ewing said that national health insurance was the keystone to his proposed health plan.

Mr. Ewing said in part:

"Success (of the Government health plan) depends on what the people themselves are willing to do about it.

"For that reason we must start laying the groundwork now. Every community must organize its own committees to analyze the plan in relation to its own community resources and community needs. These committees must establish liaison with similarly organized state groups under your leaderships charged with co-ordinating these resources and meeting demonstrated needs in a state-wide program.

"Equally important is the need to start, now, a state and local campaign of education to explain the scope and purpose of the plan and to demonstrate what it will mean to the health and well-being of every citizen of the community—to rally all business, professional and civic organizations, together with the churches and the labor unions, for an all out effort to start the ball rolling.

"To set such a project in motion requires responsible state and local leadership. It requires the unstinted faith and determination of men and women who can spearhead such a campaign and carry it through to a successful conclusion.

"I am putting this up to you, as an organization and as individuals, to undertake this responsible job. We are set to go on the most comprehensive program of health that has ever been offered to the people of the United States.

"If we all put our shoulder to the wheel we can translate this program into a living reality. And with the facilities we shall be able to command we shall create a standard of health and well-being for the entire country, such as no nation has ever dreamed."

Those six paragraphs from Mr. Ewing's talk are a clear-cut indication that the Federal Security Administration is going to the communities and people direct in its fight to put through a compulsory sickness insurance program.

Read Mr. Ewing's pleas again. Every sentence can be applied to the medical profession, aimed, of course, at educating the people to the dangers of compulsory sickness insurance. Every state and county medical society can take a lesson from Mr. Ewing's remarks and apply them to their own job ahead.

Mr. Ewing says that "success depends upon what the people themselves are willing to do about it." How true! That applies just as well in our fight.

Again, Mr. Ewing says that "to set such a project in motion requires responsible state and local leadership." Again, how true! The medical profession already has that leadership in state and county societies.

In his plea to get to the grass roots, Mr. Ewing urged his own workers to put their shoulder to the wheel. We must do that, too, within the states and counties of the nation so that the people everywhere will realize that any form of compulsory sickness insurance will necessitate a new payroll tax and the addition to the public payroll of thousands of administrative workers. We must push our 10-point program. Our job is, to put it in Mr. Ewing's words, "a state and local campaign of education," too. Only, we must stress the fact that the government isn't going to give the people anything for nothing because the Government itself cannot produce wealth.—Secretary's Letter, AMA.



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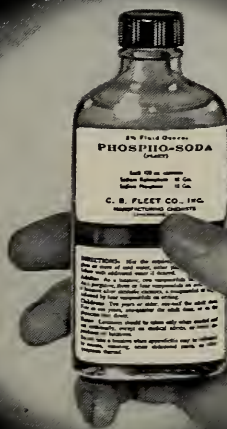
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# PR in Practice

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## PR Committee Urges Action by AMA

The MSMS Public Relations Committee under the chairmanship of L. W. Hull, M.D., Detroit, met in Lansing on November 7 to consider steps to be taken to insure a national informational program to the public. The following recommendations were made at this meeting:

"Recognizing the need for more organized public relations, this Committee recommends to The Council of the MSMS that it immediately implement the development of the following procedures:

1. Place before the AMA House of Delegates, through the MSMS Delegates to the AMA, the need for action and demand that the AMA assume immediate responsibility and leadership in the matter of national public relations that can be integrated to and through the constituent state and component county medical societies.

2. Provide for the acceptance of voluntary contributions to be used to expand and enlarge the activities of the Public Relations Committee of the Michigan State Medical Society, or to be made available to any other organization designated by The Council, engaged in medical public relations activities.

3. Permit the Public Relations department to amplify its personnel as necessary in order to effect immediate and efficient public relations programs.

## More Talks by Doctors of Medicine

An increased number of talks are being given by members of the MSMS to lay groups and organizations. Among doctors who have contributed this valuable PR work during the past month are President E. F. Sladek, M.D., Traverse City; Speaker J. S. DeTar, M.D., Milan; Secretary L. Fernald Foster, M.D., Bay City; Cancer Secretary Frank L. Rector, M.D., Ann Arbor; F. S. Leeder, M.D., Lansing; E. I. Carr, M.D., Lansing; William R. Torgerson, M.D., Grand Rapids; Hazel Prentice, M.D., Kalamazoo; C. E. Umphrey, M.D., Detroit; L. A. Scheele, M.D., Detroit.

## Heightened Interest Shown in Health

Clippings which are being received at the PR office indicate an increased interest in health and medical problems by lay people throughout the state. As a result of the constant co-operative or-

ganizational effort by health and medical groups, many doctors of medicine are being asked to serve on Health Committees of lay organizations, and there is an ever-increasing number of requests to the MSMS for speakers on medical and socioeconomic subjects.

## "Lucky Junior" Seen by 336,000

The Michigan State Medical Society motion picture "Lucky Junior" has now been seen by over 336,000 people. Doctors were notified throughout each county in which it appeared by means of individual letters telling the time and place of the showing so that every member of MSMS might have an opportunity to interest others in this PR production. In addition to the letters to doctors, news releases were sent to the editor of the paper in each community where the picture was shown along with a letter explaining the purpose and reason for this picture. Many clippings of this release have been received indicating that the press of Michigan is co-operating nicely with the medical profession.

## Michigan Health Council Reorganizes

The Michigan Health Council at its November 3 meeting in Detroit drafted plans for the reorganization of this body to include approximately 70 interested organizations. One of the first steps to be taken will be the hiring of a full-time executive secretary whose primary function will be to assist in the formation of community health councils throughout the state.

## Free Press Against Compulsory Health Plans

Many thanks are due the newspapers of Michigan for their fine editorials showing the benefits of the American system of private medicine as opposed to a socialized program. Particular credit should be given the *Detroit Free Press* for its fine editorial of November 8 exposing the farce which socialization has made of British medicine as well as its editorial opinion on Oscar Ewing's scare statement which affirmed, "300,000 people will die in the U. S. this year because of lack of medical care."

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# Editorial Comment

## OSTEOPATHS LOSE KANSAS CASE

The three-judge federal court convened at the request of four Kansas osteopaths, in a unanimous decision Nov. 16, 1948, upheld the constitutionality of the Kansas osteopathic act. In doing so, the court gave full recognition to the right of the state to confine osteopaths to manipulative therapy and to deny to them the right to "use or administer medicinal therapeutics or operative surgery with instruments." The court pointed out that prior to and since the enactment of the osteopathic act in 1913 "the science of osteopathy has been and is now based upon the concept that the curative powers for bodily disease, infirmity or disability, are within the body itself, and if the structural integrity of the body is maintained, the natural cures will combat the disability; that the art and science of osteopathy lies in detecting and correcting structural derangements in the body by manipulative therapy." In Kansas, the court said, "the osteopathic profession is classified and regulated as a drugless and knifeless healing art or science." An appeal from the decision may be taken direct to the United States Supreme Court.—Editorial, *Journal of the American Medical Association*, Dec. 4, 1948.

## EWING'S SOCIAL MEDICINE "COMPREHENSIVE"

The socialized medicine pot has been put back on the stove, and is beginning to boil again.

Oscar R. Ewing, Federal Security Administrator, apparently speaking for the Truman Administration, interviewed by the *New York Times*, stated that Congress definitely will be asked to establish a comprehensive program of health insurance on a **COMPULSORY BASIS**.

The scheme advanced by Ewing is the same as that advocated two years ago by President Truman.

National health insurance would be placed on a basis similar to present old-age insurance, paid for by involuntary payroll deductions, augmented by special taxes on industry.

The cost to workers and industry of such a program within ten years will amount to \$5,350,000,000 annually, according to Ewing's estimates.

\* \* \*

What this will cost the individual worker in terms of withholding from his pay check, we are not prepared to say. But the *New York Times* quotes from a book by Dr. Wilbur J. Cohen and Prof. William Haber, the latter a University of Michigan economist, in which the authors predict that a comprehensive social security program, including health insurance, will average between 15 and 20 per cent of payrolls.

If we are to have something less than a "comprehensive program," what will the benefits be? Under the present social security system, large groups of wage earners are excluded from participation and benefits. We doubt if the same principle can be applied to national health insurance.

Those who would be excluded, would be those who need the service most.

We must, therefore, have a "comprehensive program," if we are to have anything, covering every individual in the United States.

And the wage earner will have to pay between 10 and 20 per cent of his weekly wage (exclusive of income tax withholdings) to support it.

\* \* \*

Under Ewing's formula, doctors could elect whether or not they desire to come under the plan—whether, in other words, they would choose to remain free agents or to become part of a Federal bureaucracy.

But under a "comprehensive program" with everyone participating, we think the doctor's choice, rather, would be to join up or go into some other business.

It is planned to administer the health program on a state level, with local panels of citizens deciding questions of administrative policy. That would include determining who was entitled to benefits, under what conditions, and how much those benefits would be. The panel, not the patient, also would decide by which doctor the beneficiary would be treated.

Ewing hails this socialistic idea as being eminently fair. The panels, he says, would be just like local draft boards, noted for their impartiality.

We think they would be more like the old OPA local boards. The number of participants in the health program would require far more panels than we need draft boards. The members, incidentally, would be political appointees.

The applicant for aid would never be certain that he would not have to satisfy some member of the panel that he belonged to the right political organization.

There were too many tragic instances of that kind under OPA.

\* \* \*

There is still another aspect of this scheme which should not be overlooked. When people pay for a service, they're going to get it. That's human nature.

The wage earner, seeing a 10 per cent or more of his income going into a health fund, is going to be sick at every opportunity. The temptation

(Continued on Page 24)

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# Leon DeVel, M.D., Michigan's Rheumatic Fever Co-ordinator



Leon DeVel, M.D., of Grand Rapids has accepted the position of Medical Co-ordinator of Michigan's Rheumatic Fever Control Program. As of January 1, 1949, Dr. DeVel closed his Grand Rapids office, where he has limited his work to pediatrics for the past twenty years, and assumed the full-time position offered him in October by the Michigan State Medical Society and the Michigan Society for Crippled Children and Adults, Inc.

Dr. DeVel's duties include the integration and standardization of the thirty Rheumatic Fever Control Centers located throughout Michigan. Detroit has sixteen of these Centers, with others situated in Ann Arbor, Jackson, Kalamazoo, Grand Rapids, Lansing, Pontiac, Saginaw, Bay City, Alpena, Traverse City, Muskegon and Marquette. Dr. DeVel will help in the organization of additional Centers including those scheduled for Battle Creek and Port Huron. All of these Centers are maintained through a grant to MSMS by the Michigan Society for Crippled Children and Adults, Inc., which organization receives its funds from the sale of Easter Seals.

Dr. DeVel was born January 4, 1899, in Antwerp, Belgium, a descendent of medical ancestors. After receiving his medical degree from the State University of Liege in 1923, he pursued a fellowship in Pediatrics at the C. R. B. Educational Foundation for two years. Then followed in quick succession a year's internship at Children's Hospital, St. Louis, Missouri, a Pediatric residency at the University of Michigan Hospital, Ann Arbor, a year's work as instructor in Pediatrics at Ann Arbor, and another year as Pediatric instructor at the University of California Medical School. He located in Grand Rapids in 1928 and has practiced there since that date, except for three years (1942-1945) when he served as Lt. Colonel in the Medical Corps of the Army of the United States. He was awarded the Bronze Star Medal and was made an Officer of the Order of the Crown (Belgium), for his outstanding military service.

Dr. DeVel is a Diplomat of the American Board of Pediatrics and a Fellow of the American

Academy of Pediatrics. His interest in Rheumatic Fever has been that of a pioneer. His early work in his own practice and subsequently as a member of the first Rheumatic Fever Control Committee of MSMS has been recognized not alone in his own community but throughout the state.

Dr. DeVel is well fitted as an administrator and organizer for his new and important labors in Rheumatic Fever Control. Quiet and unassuming, he gives most credit to others for accomplishment in any undertaking, and is able through his zeal for anonymity to achieve results that come only from united effort skillfully directed.

Michigan Medicine is to be congratulated on finding a physician of Dr. DeVel's standing who is willing to sacrifice a well-established private practice in order to better serve the people—and particularly the children—of this commonwealth. The future of Michigan's Rheumatic Fever Control Program, with Dr. DeVel in a key position, looks bright.

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## EWING'S SOCIAL MEDICINE "COMPREHENSIVE"

(Continued from Page 22)

to draw benefits on any pretext will be great. It will be easier than working. The professional grafter on the dole has already become an established figure in our national life—people who never work and never intend to. In England where there are millions of them they are known as "Spiv."

Malingering will become a fine art, and because the program will be politically inspired, it will be encouraged.

Under Ewing's "comprehensive program," we seriously doubt if there could ever be enough doctors, enough hospitals, or enough nurses to take care of those who are going to get their money's worth—or else.—Editorial, *Detroit Free Press*, Dec. 13, 1948.

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Mr. Ewing says that his proposal is not socialized medicine, and I think we can all agree with that: on the same general grounds that the Social Security Act has never provided social security. The trick lies in justification for a special tax to pay for the program. It will take a lot more than Mr. Ewing's oratory to authorize the bureaucratization of health.—WILLIAM BROMME, Editorial, *Detroit Medical News*, Sept. 20, 1948.

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# Military Medicine

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## ARMY DOCTORS PLAN STUDY OF MELANOMA

The Army Medical Department will soon point its research guns at another disease that has long been an enigma to the medical world, Major General Raymond W. Bliss, the Surgeon General of the Army, announced. Malignant melanoma is not a common disease; but because early diagnosis has seldom been possible, and because successful treatment (other than early surgery) has never been found, the Army has decided to make an intensive study of some 400 autopsy and surgical specimens. Having collected this material over a number of years, the Army Institute of Pathology is now preparing thousands of slides for an exhaustive study that may continue five or six years. Pathologists and dermatologists of the Army Medical Department hope that findings will bring a complete histological understanding of the disease, its manner of growth, and criteria for recognition of malignant melanoma in an early stage . . . before it has had time to pump death into the blood stream.

Malignant melanoma originates from an apparently harmless black mole and kills with lightning speed. A mole that has been inconspicuous for years may suddenly grow larger and become deeper in color. This may happen after the nevus has been irritated or bruised through contact with a tight collar, a belt, or a shoe. It is true that every mole that becomes irritated does not cause malignant melanoma; but the danger is sufficiently great that a well known dermatologist has said, "Anyone who permits a mole to become inflamed takes part in his self-destruction." Through an inexplicable change in its cellular structure, the small nevus becomes malignant; and unless the entire area is removed immediately by surgery, it may add one more death to the number of people who have died from melanoma. Two to four years is the maximum time that one can expect to live after the malignancy has set in.

Melanoma is one of many problems on which Army pathologists, dermatologists, and allied scientists are at work. Of value to civilians as well as to the Armed Forces, is a project recently completed by the Army Industrial Hygiene Laboratory, in co-operation with officers and employes of the Philadelphia Quartermaster Depot. Patch tests have been made on 300 civilian employes who volunteered to co-operate in this research to find out which types of clothing and equipment do, or do not, cause irritation of the skin. Cloths and fabrics were the materials tested. Lt. Col. B. D. Holland of the Army Medical Corps reports that a wealth of interesting data has been found and that results will soon be made known.

Other projects under way are studies in radiation injury; carcinoma of the lip; deficiency diseases having dermatological manifestations; atabrine dermatitis; and high altitude frostbite.

To cover the Army's broad field of dermatology, twenty-seven additional specialists are needed in the

Army Medical Department: Seven Dermatologists who are Board Members and twenty who have completed formal dermatology residencies of two to three years duration. Information regarding these openings may be obtained by writing The Surgeon General of the Army, Washington 25, D. C.

## DDT SOLUTION PROTECTS WOOLENS

For the protection of wool against damage by moths and other insects, a 5 per cent solution of DDT proves far more effective than any of the currently used agents, according to results of an Army sponsored research project described by Major Frederick W. Whittemore, an Army entomologist. "This discovery, made by a Department of Agriculture scientist, will mean an inestimable saving to the government in preserving its woolen goods in storage as well as to individuals in civilian life," said Major Whittemore.

The Army Committee for Insect and Rodent Control, serving in an advisory capacity to the Department of the Army General Staff, has been instrumental in approving and implementing this research project in Savannah, Georgia, carried out by the Department of Agriculture on a transfer of funds by the Office of the Quartermaster General. In this study, hundreds of rolls of woolen cloth have been stored in different rooms and treated with various insecticides and repellents. At the end of each year the rolls are inspected for damage, and the damage to each roll is assessed in terms of percentage of protection given by the agents used. "This new assurance that DDT gives for the protection of woolen goods is of great economic significance," said Major Whittemore.

Attending the joint convention of the American Society of Tropical Medicine, the National Malaria Society, and the American Society of Parasitology, Major Whittemore added that reserve commissions are now available for 15 entomologists in the Medical Service Corps of the Army. "Opportunities are open to young scientists with B.S. or M.S. degrees and no experience in the field. After one or more years on active duty as Reserves, they may apply for competitive tours of duty for integration into the Regular Army." Information may be obtained by writing the Surgeon General of the Army, Washington 25, D. C.

## ARMY RESEARCH ON BLACK FLIES

For as little as \$5.00 in materials and a few hours labor, a plantation owner, a farmer, or a rancher may reduce the hazards of black flies on his land, the Office of the Surgeon General of the Army reported. In a co-operative research project, the Army Medical Department and the Department of Agriculture have found that a mixture of oil with DDT sprayed on the surface of small streams running through the tract of land, will destroy the black fly's larvae which thrive in fast-moving

*(Continued on Page 28)*

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\*Beams, A. J., and Endicott, E. T., Histologic changes in the livers of patients with cirrhosis treated with methionine, *Gastroenterology* 9:718-735 (Dec.) 1947.



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# Michigan Medical Service

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## FORD ENROLLED IN MMS

December first found the majority of Michigan's Ford Motor Company employes and their families enrolled in Blue Cross (Michigan Hospital Service) and Blue Shield (Michigan Medical Service). Of the 100,000 Ford workers to whom Blue Cross-Blue Shield application cards were distributed, approximately 80 per cent signed up for Blue Cross, with a large majority of that 80 per cent enrolling also in Blue Shield.

In Michigan, the Ford Motor Company enrollment now covers an estimated 197,000 persons, a figure which increases the total Michigan Medical Service enrollment to over 1,250,000 subscribers, and the total Michigan Hospital Service enrollment to over 1,500,000 subscribers.

Following negotiations last summer, Blue Cross-Blue Shield were chosen by the Ford Motor Company and the UAW-CIO as the program of hospital-surgical protection for Ford employes throughout the United States. The decision to make Blue Cross-Blue Shield available to Ford employes and their families was the result of intensive study by union and management committees. Chief reasons

for selection of the hospital-and-doctor-sponsored program are the service benefit features of the organizations and their economical operating methods.

Thirty-three Blue Cross Plans in other states throughout the nation will administer the program of hospital-surgical protection for Ford employes outside of Michigan. The workers and their families are enrolled through the local plans in their communities, pay the local rates, and will receive the local benefits.

## MERCY HOSPITALS CO-OPERATING

St. Mary's Hospital in Grand Rapids again became a Blue Cross participating hospital on December first, according to an announcement by William S. McNary, executive vice president of Michigan Hospital Service, the Blue Cross Plan.

St. Mary's was one of the thirteen Sisters of Mercy hospitals in Michigan which withdrew from participation in the Blue Cross program in 1946, and the sixth of those hospitals to become a Blue Cross institution again. Sister Theodosia is Superintendent of St. Mary's Hospital.

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## ARMY RESEARCH ON BLACK FLIES

*(Continued from Page 26)*

brooks and small rivers. Army entomologists state that a man with an ordinary 2-quart spray-gun may stand on the side of a stream with the wind at his back and spray the surface of the water in such a manner that currents will carry the film of DDT as far as 25 miles downstream. Care should be taken that not more than one-tenth of a pound of DDT is used to an acre of land, dissolved in a proper amount of diesel oil. Upon request, the Department of Agriculture will provide directions for using this mixture without hazard to fish and other valuable animals.

In times of high water and floods, countless swarms of black flies (known to entomologists as *Culicoides*) add to the problem of saving cattle, sheep, and poultry. In such times thousands of these animals may die from the fly's attack on their eyes and respiratory tracts. While no actual disease can be traced to the black fly's bite, it is believed that acute local inflammation is caused by a poison injected. During floods, workers may be temporarily blinded by the attack of these flies, that feed on the blood of both man and beast.

Vacationists, sportsmen, hunters, and workers in certain areas of the U. S., and Alaska will welcome news

of this simple and effective method of controlling the black fly; for it has long been a problem in mountainous areas drained by fast-moving streams and in the southern Mississippi valley at flood times.

Army entomologists are participating in the joint convention of the American Society of Tropical Medicine, the National Malaria Society, and the American Society of Parasitology now being held in New Orleans.

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# The JOURNAL

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## Pre-anesthetic Medication

By N. M. Bittrich, M.D.  
Detroit, Michigan



THE PRE-ANESTHETIC medication of a patient about to undergo a surgical operation is a most important phase of the anesthetic. It is actually as important as the proper choice and administration of the anesthetic agent. With most anesthetic agents the proper or improper pre-

anesthetic medication of the patient may make or break the anesthetic. Pre-anesthetic medication is often regarded very lightly and applied improperly despite its importance as far as the smoothness of the anesthetic or safety of the patient is concerned. The objects of preliminary medication are as follows:

1. To mitigate the toxicity of local anesthetic agents.
2. To secure mental rest and effect a safer and better anesthetic.
3. To lessen secretions.
4. To overcome autonomic overactivity.
5. To lower the basal metabolic rate to a satisfactory starting point.

In regard to the toxicity of local anesthetic agents, it was found that animals could stand a lethal dose of procaine or cocaine when previously narcotized with a barbiturate. A local anesthetic agent may be very toxic to the patient. An untoward effect is manifested as a mild or severe procaine reaction. With a mild procaine reaction a patient may have a slow pulse, low blood pres-

sure, clammy appearance, and may break out in a cold sweat. In addition, there may be central nervous system manifestations of the toxic effect, seen as a depression or as a marked apprehension, during which the patient may have a feeling of impending death. The so-called mild procaine reaction may go on to a severe one, which is manifested by coma, convulsions, or death. A procaine reaction may be prevented by the administration of a barbiturate two hours before the local anesthetic agent is to be administered. If the patient develops a procaine reaction despite the pre-anesthetic barbiturate, the ultra-fast-acting evipal or pentothal should be given intravenously in amounts sufficient to stop the convulsions, or less severe toxic manifestations. In addition to the barbiturate, the patient should also be given morphine and scopolamine one and one-half hours before arriving in the operating room. Local anesthesia does not in itself alleviate the sense of touch and the mental trauma which the patient may suffer. Therefore, pre-anesthetic medication should be carried out to the point of actual amnesia. Scopolamine and nembutal relieve emotion. Morphine is well-known for its euphoric and analgesic effect.

Mental rest should begin the night before operation. Too often the patient comes to the operating room with the story of remaining awake all night worrying about the impending operation. This may lead not only to mental exhaustion but also to cardiac exhaustion because of a long-continued rapid pulse as a result of nervous excitement. Therefore, the night before operation the patient should be adequately sedated with a short-acting barbiturate such as nembutal, seconal, amytal, et cetera. Mental rest is especially important because it is well known that primary shock may be neurogenic in origin. If primary shock is added to the toxicity of the anesthetic agent, operative trauma,

Dr. Bittrich is Director of Anesthesia, Providence Hospital, Assistant Professor of Clinical Anesthesiology, Wayne University School of Medicine.

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loss of blood, et cetera, the additive effects may become quite serious. Securing the proper mental rest is especially important to the patient because it directly affects the amount of anesthetic agent

of the patient be lowered so that the patient can be safely anesthetized.

Guedel<sup>1</sup> has stated that the difference in resistance to anesthetic agents is largely a difference in

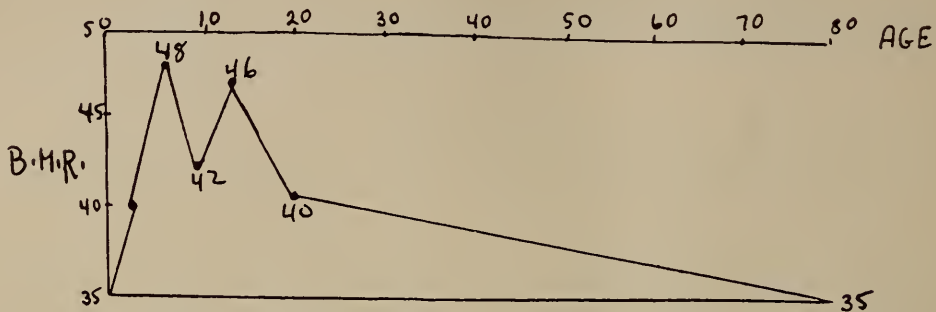


Fig. 1. Curve of the normal metabolic rate throughout life, estimate in calories per hour per square meter of body surface. (Compiled by Will Shimer from the tables of DuBois and Benedict; JAMA, (Nov. 29) 1924.)

necessary to take a patient to a definite depth of surgical anesthesia. Guedel has shown that the more emotionally excited a patient is, the higher is the basal metabolic rate. This necessitates a greater and more toxic amount of anesthetic agent in the blood stream than if the patient had a lower rate.<sup>1</sup> The end result is more toxicity to the patient.

The properly premedicated patient can be anesthetized more easily and safely. In addition to being anesthetized with difficulty, the badly frightened and crying child or adult often continues with rapid pulse and sighing respirations deep into the third or surgical stage of anesthesia.

Pre-anesthetic medication is important in the prevention of autonomic overactivity. Certain agents such as cyclopropane and pentothal cause overactivity of the parasympathetic nervous system. The belladonna group of drugs are indicated to prevent these undesirable side reactions.

Overactivity of the sympathetic nervous system in the nervous patient may result in excessive adrenalin output and sensitization of the heart muscle. With certain anesthetic agents such as chloroform, cyclopropane and ethyl chloride, and under the proper conditions, ventricular fibrillation may occur. Unless heroic measures are employed, the patient will die of anoxia. The barbiturates are important for premedication of the nervous patient because they inhibit sympathetic overactivity.

Pre-anesthetic medication with one of the belladonna derivatives prevents excessive secretions and salivation with ether, vinethene, and cyclopropane.

With inhalation anesthesia particularly, it is especially important that the basal metabolic rate

the metabolic state of the patient. The starting point of anesthetic induction varies with the metabolic rate and this in turn varies with certain conditions at the time of the operation. Stated simply, this means that the higher the basal metabolic rate, the harder it is to anesthetize a patient. With a high basal metabolic rate it is necessary to start at a higher level and traverse a greater distance to get a patient down to a satisfactory surgical plane of anesthesia. The higher the basal metabolic rate, the greater the oxygen needs of the patient. This makes it impossible to give a nitrous oxide oxygen anesthetic with safety, because it is necessary to push the nitrous oxide at the expense of oxygen, resulting in a severely anoxic patient. Prolonged or even short periods of anoxia may result in irreparable brain damage and death. Many other untoward effects of anoxia, such as liver damage, et cetera, may occur.

There are four causes of increase of the basal metabolic rate throughout life. Each degree of fever increases the rate  $7\frac{1}{2}$  per cent. Pain is also an important factor and can only be estimated. In the presence of emotional excitement one is more sensitive to pain. Endocrine imbalance is also an important cause of increase or decrease in the basal metabolic rate. The fourth and very potent cause of increase of basal metabolic rate is emotional excitement. It is the fear of the mask, of the surgeon's knife, of the little ones left behind, of the unknown, et cetera. It is the excitement of a sudden injury or the pure fright of the young child. It may be seen from early youth up to old age. The screaming, unpremedicated child who is

brought to the operating room and held down while someone suffocates him with ether may have night terrors for months afterward. The metabolism of a thoroughly frightened child is equal to that of an adult with severe thyrotoxicosis. Emotional excitement. Barbiturates do not lower the condition.

With proper premedication the basal metabolic rate can be lowered to a satisfactory starting point. We have at our disposal a number of well-trying and satisfactory agents to lower the rate, reduce emotional excitement is enhanced by a hyperthyroid

The evening before operation the patient should receive some form of barbiturate to relieve emotional excitement is enhanced by a hyperthyroid basal metabolic rate except in overdoses. They are especially valuable in relieving emotional excitement. They do not relieve pain. This is well known to all who have attempted to control the pain of the obstetric patient with heavy doses of barbiturates during the first stage of labor. The patient sleeps quietly until a pain occurs, at which time she tosses wildly about the bed and must be restrained.

In the presence of pain the night before operation, an analgesic drug, such as morphine or one of its derivatives, is indicated. Barbiturates are most often given orally. If they are to be used on the morning before the operation they should be administered several hours before the anesthetic is started. Small children who will not take barbiturates by mouth may receive them rectally. For the purpose of rectal administration of barbiturates we have the choice of several drugs. One of these which we use occasionally is pentothal. This can be administered in 2½ per cent solution one half hour before the patient comes to the operating room. An index of .8 is used. For example, a 40-pound individual receives .8 times 40, or 32 c.c. of the 2½ per cent solution. The patient should also receive a dose of atropine with this drug. This is a basal anesthetic and must be supplemented in the operating room.

Seconal was recently advocated as a basal premedication in children who are "frightened to death" of coming to the operating room.<sup>2</sup> The dose is 0.14 to 0.15 gr. per pound of body weight, using 6 grains as a maximum dose. The drug should be given rectally about thirty minutes before the child is brought to the operating room. It must be supplemented in the operating room. Atropine should also be given by hypodermic.

The older frightened child may be given pentothal intravenously in the room in amounts just adequate to cause sleep. This drug is also supplemented with another anesthetic agent in the operating room.

Opium derivatives are the most commonly used agents for premedication. Morphine is the best agent of the group. Morphine lowers the basal metabolic rate directly. If a normal person is given a hypodermic injection of morphine and has the metabolic rate checked every one-half hour, it will reach its lowest level in one and one-half to two hours. Therefore, the morphine should be given one and one-half hours before the anesthetic is administered. It is a mistake to give a patient a hypodermic injection fifteen minutes before going to the operating room. The injection will have no effect and will just begin to work at the end of the operation. The patient then has the depressing effect of the morphine and the anesthetic to combat. When it is impossible to wait one and one-half hours for the effect of the hypodermic injection, the morphine should be given intravenously, when its effect will be apparent in about five to ten minutes. Patients should be premedicated on the basis of their estimated basal metabolic rate and not on the basis of their weight. Recently, a patient aged eighty-five was given morphine sulfate, gr. ¼, and had to have stimulants and oxygen for three days as a result. When this patient came to operation, a dose of morphine, gr. 1/24, was sufficient for premedication and pain relief. A dose of morphine which suffices for a normal patient may throw the same aged myxedematous patient into a severe state of respiratory depression.

Morphine lowers the basal metabolic rate indirectly by its pain-relieving effect. It also causes euphoria and thereby still further lowers the rate. In those patients who are extremely nervous as a result of hyperthyroidism, it is a good practice to give the patient two doses of morphine combined with a suitable dose of scopolamine. The first dose should be given two hours before the anesthetic. The patient is then visited one hour later and a second dose is given depending on the effect of the first dose.

With morphine it is especially important that we consider the anesthetic agent to be used, in addition to the patient's age, basal metabolic rate, et cetera. With nitrous oxide and oxygen anesthesia it is essential that the metabolic rate be lowered as much as possible, so that the patient's demand for



oxygen is lessened. The nitrous oxide may then be increased without danger of brain damage from cerebral anoxia. Cyclopropane is a respiratory depressant and so is morphine. Therefore, the dose of morphine should be lessened when the use of this agent is contemplated. Ether depresses respirations less than cyclopropane so that a heavier dose of morphine may be used, but less than that for nitrous oxide.

Of recent years many substitutes for morphine have appeared. One of these known as demerol (1-methyl 4 phenyl-piperidine 4 carboxylic acid ethyl ester hydrochloride) was studied for its pre-anesthetic effects.<sup>3</sup> This drug has an antispasmodic effect similar to atropine. With demerol, less nausea, vertigo, and more drying effect was found than with morphine. There was adequate sedation and less depression of respiration. 100, 75, or 50 mg. of demerol were substituted for  $\frac{1}{4}$ ,  $\frac{1}{6}$ , or  $\frac{1}{8}$  gr. of morphine, respectively. With each dose of demerol a suitable dose of scopolamine was used.

Belladonna derivatives have an important place in pre-anesthetic medication. Of these atropine and scopolamine are the important alkaloids. Atropine or scopolamine is used with ether to prevent the excessive formation of secretions. It is used with vinethene to prevent excessive salivation, which may be so marked as to cause actual obstruction of the trachea, resulting in anoxia. Atropine or scopolamine is particularly indicated before intravenous pentothal or evipal anesthesia. With pentothal there may be depression of the sympathetic nervous system, causing overactivity of the parasympathetic system, which results in vagus stimulation. This is evidenced clinically by laryngospasm, cough, sneezing, and irregular pulse. Atropine or scopolamine depresses the vagus and helps to overcome these untoward effects of pentothal. If they occur despite premedication, then an intravenous dose of  $\frac{1}{75}$  gr. atropine or scopolamine is indicated. Cyclopropane is also a parasympathetic stimulant and may result in marked slowing and irregularity of the pulse, and laryngeal spasm. Again atropine or scopolamine is indicated to depress the vagus and prevent some of these untoward effects. Atropine is said to be indicated in spinal anesthesia to prevent undue contraction of the intestine as a result of parasympathetic overactivity. Atropine is a direct metabolic stimulant. The same is true of scopolamine but to a lesser extent because scopolamine causes amnesia and relieves anxiety and apprehension which are some

TABLE I

Age	Dose Morphine	Dose Atropine or Scopolamine
Birth	1/240 gr.	1/600 gr.
1 to 2 years	1/120 gr.	1/400 gr.
2 to 4 years	1/60 gr. to 1/32 gr.	1/400 gr.
4 to 6 years	1/16 gr.	1/400 gr.
6 to 8 years	1/12 gr.	1/300 gr.
8 to 14 years	1/8 gr. to 1/6 gr.	1/200 gr. to 1/150 gr.
14 to 18 years	1/6 gr.	1/150 gr.
18 to 45 years	1/4 gr. to 1/6 gr.	1/100 gr. to 1/150 gr.
45 to 55 years	1/6 gr.	1/150 gr.
55 to 65 years	1/8 gr. to 1/12 gr.	1/200 gr. to 1/300 gr.
65 to 75 years	1/12 gr. to 1/16 gr.	1/300 gr. to 1/400 gr.
75 to 85 years	1/16 gr. to 1/24 gr.	1/400 gr. to 1/600 gr.

of the major causes of increase in the basal metabolic rate. Therefore, it may be said of scopolamine that it directly increases the basal metabolic rate and indirectly lowers it. Scopolamine has the same drying effect as atropine and should be used in preference. It may be used in the infant and adult alike, provided it is used in the proper proportion with morphine. The proper proportion is  $\frac{1}{25}$  the dose of morphine. For example: With morphine, gr.  $\frac{1}{4}$ , should be used gr.  $\frac{1}{100}$  of scopolamine; and with morphine, gr.  $\frac{1}{16}$ , should be used scopolamine, gr.  $\frac{1}{400}$ . Fresh scopolamine should always be used. At one time in a hospital a number of patients developed side reactions to scopolamine, such as extreme flush, disordered mentality, et cetera. Investigations revealed that the supply had run out and the druggist had searched through his drawers and found some bottles of old scopolamine on which the labels were yellow with age. A fresh supply corrected the difficulty.

Although no set rules or tables can be used as a routine, nevertheless Table I is a suggestion of the proper premedication and the doses of scopolamine used. Infants tolerate atropine and scopolamine better than adults. In infants, we, therefore, use larger doses of scopolamine in proportion to the dose of morphine. Where small doses of morphine are used, we always issue directions to minimize mistakes. For example, when a  $\frac{1}{240}$  dose of morphine is ordered for an infant we specify that gr.  $\frac{1}{8}$  should be dissolved in 30 c.c. of sterile distilled water, mixed well, and 1 c.c. given by hypodermic injection. If gr.  $\frac{1}{120}$  is ordered we specify that gr.  $\frac{1}{8}$  is dissolved in 15 c.c. of sterile distilled water, mixed well, and 1 c.c. given. With this method of using large dilutions, mistakes are minimized. The doses in Table I should be varied according to the health, apparent age, and the basal metabolic rate of the individual.

The dose of morphine and scopolamine should be given one and one-half hours before the anesthetic. If time does not permit, the same dose may

be given intravenously. This should be given slowly over a period of several minutes. It will be effective in five to ten minutes. If, in addition, a barbiturate is desired, it is given before the anesthetic.

A toxic thyroid patient is premedicated as follows: The night before operation, a dose of barbiturate is given at 8:00 p.m. This should be heavy enough to cause sleep for the entire night, or an additional dose should be given if the patient awakens. In the morning two hours before operating time, the patient is given the first dose of morphine and scopolamine. For an adult this is usually gr.  $\frac{1}{4}$  and gr.  $\frac{1}{100}$ , respectively. The patient should be visited one hour later, and if he is not well asleep, a second dose of morphine, gr.  $\frac{1}{6}$  to gr.  $\frac{1}{8}$ , and scopolamine, gr.  $\frac{1}{150}$  to gr.  $\frac{1}{200}$ , should be given. The patient is then brought to the operating room under intravenous pentothal, which is administered in the room. With this method the patient is well sedated and a crisis may be prevented.

Occasionally, we encounter the nervous individual who refuses to come to the operating room unless asleep in the room. For this patient rectal penthotal or avertin (tri-brom-ethanol) may be used. Either are satisfactory although somewhat troublesome to use. Avertin must be given on the basis of what a patient should weigh. It should not be used with rectal or liver disease. Also the patient's basal metabolic rate should be taken into account. The higher the rate, the more avertin the patient can tolerate, and vice versa. Avertin depresses the cardiorespiratory system. Therefore, with avertin no morphine is used, only atropine.

A simpler way of handling this type of patient is to premedicate in the usual way with morphine and scopolamine, and then bring the patient from the room to the operating room under intravenous pentothal.

In conclusion, the purpose of pre-anesthetic medication is to mitigate the toxicity of anesthetic agents, lessen secretions, lower the basal metabolic rate, and minimize undesirable side reactions resulting from autonomic overactivity. A patient should not be routinely or haphazardly premedicated. A careful study of the patient and an estimate of the basal metabolic rate should be made. The anesthetic agent should then be decided upon. After taking into consideration all of the previous factors, the pre-anesthetic agents and doses may thus be safely prescribed for the patient.

(References on Page 46)

## Pulmonary Edema

### *Experimental Observations on Dogs Following Acute Peripheral Blood Loss*

By Robert M. Eaton, M.D.

Grand Rapids, Michigan

THE PURPOSE of this paper is to present a series of observations on dogs, which show that acute peripheral blood loss will produce pulmonary edema and pulmonary hemorrhage of marked degree. In consequence of these pulmonary changes, severe circulatory disturbance occurs in the vascular bed of the lungs. This disturbance is reflected in the circulatory system as a whole, and is quite apart from the effects of the acute blood loss. The pulmonary changes which follow bleeding are *not* transient; these alterations have been observed as long as four or five days. If these observations are true, and stasis in the pulmonary circulation can be anticipated as a complication of acute blood loss, then intravenous therapy in such cases must be used judiciously as to quantity and type.

The first observation was a gross specimen of right lung taken from a dog sacrificed four hours after loss of the 25 per cent blood volume. The blood loss was sustained, free-flowing from the femoral artery, using an 18 gauge needle. A cross section through the right lower lobe of the same lung quite vividly demonstrated areas of vascular congestion and hemorrhage.

In order to prove that circulatory imbalance and pulmonary stasis do exist after acute hemorrhage, the following animal experiments in circulatory dynamics are submitted. Continuous carotid artery and pulmonary artery pressures were registered by Wiggers manometers on a moving photographic screen. Before hemorrhage the carotid artery pressure was 130/104 mm. mercury while the pulmonary artery pressure was 18 mm. mercury. During hemorrhage the carotid artery pressure began to drop and was 76/40 mm. mercury, and the pulmonary artery pressure was down



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From the Department of Surgery, Washington University School of Medicine, Saint Louis, Missouri.



to 14 mm. mercury. Twenty minutes after blood loss, the carotid artery pressure was 52/18 mm. mercury while the pulmonary artery pressure was barely perceptible. Forty minutes after blood loss, the carotid artery pressure was even lower than after twenty minutes; yet there was *definite elevation of pulmonary artery pressure*. Direct continuous pressures of the femoral artery, the femoral vein and the pulmonary artery were recorded on a six-foot Kymograph. This demonstrated the plateau of elevated pulmonary artery pressure which may be anticipated forty to fifty minutes after peripheral blood loss. There was no comparable elevation of arterial pressure. The dynamic changes here described suggest that in the face of lowered blood volume from acute blood loss there is developed a definite increase in resistance within the pulmonary vascular bed.

*Pulmonary Moisture.*—The changes in circulatory dynamics were striking, and simultaneous pulmonary histologic studies were so convincing of associated edema that it seemed desirable to show by some quantitative procedure just when and to what extent pulmonary moisture occurs following hemorrhage. A series of animals was subjected to hemorrhage (25 per cent blood volume) and sacrificed at varying intervals after bleeding. Pulmonary moisture content was ascertained by a seventy-two hour desiccation and dehydration of lung samples, using the method described by Elman. In this series of thirty-one animals it was found that there was an initial rise of pulmonary moisture in the first twenty minutes period following hemorrhage. Forty-five minutes after blood loss, the moisture content of the lungs dropped below normal levels. A second rise of lung moisture occurred one and one-half hours after blood loss, rising to well above "normal" levels, after which the moisture gradually leveled off to average normal at four hours.

With this much evidence of tissue and alveolar edema developing following acute peripheral blood loss, it seemed wise to make hematocrit and plasma protein determinations during the same time intervals. A great many dogs of all experiments were used with uniform results; however, only four dogs were used specifically for the data presented. The hematocrit concentration was initially elevated at ten minutes, reached its peak at forty-five minutes, and receded to normal level or below at four hours. The plasma proteins were correspondingly depressed.

*Lymph Flow.*—That the occurrence of pulmonary edema following hemorrhage is of sudden onset and of some severity may be graphically shown by the following experiments. The pulmonary lymphatic duct was canalized in anesthetized dogs, using the technique of Drinker. A doubling in volume of lymph flow was noted forty-five minutes following hemorrhage, gradually returning to normal. This increase in lymph flow from the pulmonary lymphatic duct was paralleled by cervical systemic flow. In passing, I should state that the flow of lymph from the pulmonary lymphatic duct was greatly increased when intravenous physiologic saline was used as therapy following acute blood loss, and that there was minimum to no increase when blood or plasma were used as intravenous therapy. The dilution of the plasma proteins by physiologic sodium chloride, and the depletion of the osmotic pressure effect which results from its use, is the probable cause of the increase in pulmonary transudation when this fluid is used as therapy.

We shall next take up the pathologic lung changes. The lung picture presented in these experiments following acute hemorrhage was most impressive. Within four hours the lungs showed a mottled surface with raised red areas varying in size. The cut surface showed areas of patchy hemorrhagic infiltration. Such areas were noted largely in the middle and lower lobes, and there was a generalized distribution throughout the lobes. Microscopically these lungs showed tissue and alveolar edema, vascular congestion, and occasional hemorrhage and some compensatory emphysema. (We are indebted to Dr. R. A. Moore of Department of Pathology for a rather extensive score sheet of pulmonary pathologic change.) It is to be emphasized that these rather profound pathologic alterations may persist for as long as five days, and that during this time the animals may appear to be normal; hence, functional alteration of the lungs may not become apparent in spite of extensive anatomical lesions.

*Intravenous Fluids.*—If the foregoing facts are true, it can be easily visualized that intravenous fluid administration might produce further damage to the pulmonary vascular bed by either elevation of venous pressure or dilution of the plasma proteins or both. In fact, from experimental observations, the administration of fluids following blood loss is associated with a greater increase in pul-

monary moisture than is found four hours after untreated hemorrhage. Greater degrees of pulmonary edema are noted when infusions of physiologic sodium chloride are given than when either plasma or blood is used. Use of whole blood in infusion produces slightly less pulmonary moisture than does plasma. It then becomes strikingly apparent that the use of intravenous fluid, even under optimum conditions, must be with caution following moderate, to severe hemorrhage, and careful use of such treatment is thus emphasized.

### Discussion

In the light of known facts concerning pulmonary physiology, it is difficult to explain the succession of physiological phenomena noted in these experiments. It seems probable that a logical approach may be as follows:

The immediate decrease in cardiac output and events subsequent to acute blood loss are: loss of blood volume, rapid fall in vascular pressure, slowing of the circulation (our experiments to show lengthening of the circulation time were not given in this paper). These factors together produce a sudden state of circulatory anoxia. As a result of this anoxic state, endothelium is damaged, capillary endothelium becomes more permeable, and there is rapid transudation of fluid from the vascular bed to the tissue spaces and into the alveoli. There is congestion and dilatation of the pulmonary capillary bed.

With this loss of fluid from the vascular bed there is hemoconcentration and elevation of the plasma protein level. As pulmonary congestion and edema become more severe, a pulmonary block to normal circulation is produced, and as oncoming blood is impounded against a pulmonary wall of resistance the pulmonary artery pressure and peripheral venous pressure rise. This, then, I believe to be the framework of circulatory and physiologic changes following acute blood loss.

Time does not permit the detailed discussion this subject deserves, but several points should be given further explanation.

The acute pulmonary edema of the first twenty minutes following blood loss may be due to two factors not yet mentioned in this paper. The first is the increase in intra-alveolar negative pressure which results from the deep breathing associated with blood loss. In 1921, Graham, using both the dog and human lung suspended in a bell jar,

showed that forceful expiration will produce pleural effusion by the squeezing effect of the respiratory effort. In 1943, Drinker found that labored breathing produces an increase in pulmonary transudation in the dog, as evidenced by increase in lymph flow from the pulmonary lymphatic duct. Heavy deep breathing is noted in the experimental animal following acute blood loss, and in the lymph studies just presented the flow of lymph from the pulmonary lymphatic duct is increased at the time of blood loss. It seems probable that the same factor of increased negative intra-alveolar pressure may in part be accountable for the alveolar edema so quickly developed in acute blood loss. The second factor pertains to the laws of the flow of fluids, namely, "As fluids flow through tubes, velocity is inversely proportional to the cross section, and lateral pressure is inversely proportional to the velocity." Once again, it should be pointed out that the circulation time is decreased following acute blood loss and that there is vascular congestion in the lungs. These same principles are involved in the progressive development of sacculations in varicose veins. An increase intracapillary lateral pressure would tend to force fluids out of the blood vessels and augment the sucking effect of the intra-alveolar negative pressure, and produce the early edema noted in our desiccation experiments.

The question is quite naturally raised: Why should there be the very rapid drop in pulmonary moisture forty-five minutes after blood loss, as shown by the desiccation experiments? The dynamic factors just described, namely, sudden increase in intra-alveolar negative pressure and the acute slowing of the circulation noted as quick response to hemorrhage, are transient. There is at this point not too much alteration in fluid balance, plasma proteins are slightly above normal, and there is a natural flow of fluid from the tissues back to the vascular system.

However, endothelial damage has been sustained. As Blalock has said, "The length of time that the patient lives with inadequate supply of blood and oxygen to the tissues determines the alterations that are to be found in them." And as Haldane stated, "Anoxia not only stops the machine but wrecks the machinery." Gradually there is again a transudation of fluid through an endothelial structure damaged by the anoxia of acute hemorrhage. Fluid accumulates in the alveoli, the lung becomes stiffened and held in hyperinspiration,



and blood is gradually impounded in the pulmonary artery against this pulmonary block. It is from one to one and one-half hours after blood loss that pulmonary artery pressure reaches its peak, and it is at this same time that the second rise of pulmonary moisture also reaches its peak.

From a practical therapeutic standpoint, what may be gained from the observations of these experiments? The average operative blood loss is not too great, and patients seem to compensate for almost any intravenous therapy given them, but even in these individuals an occasional pulmonary edema is clinically evident and postoperative pneumonia is still not infrequent. However, the elderly and poor risk person requiring radical procedure with major blood loss may come more prominently in the category of these experiments. These individuals most certainly receive varying degrees of pulmonary endothelial damage which must be reckoned with for at least five days after surgery. Intravenous plasma or blood is a requirement for them; however, it must be given to them slowly and venous pressures must be watched. One could give their additional fluid requirement by the subcutaneous route, rather than risk dilution of the plasma proteins and lowering of osmotic pressures by the use of intravenous physiologic sodium chloride, pouring the fluid into a venous system which is not capable of accepting it.

Abrupt elevation of blood volume by the use of too rapid administration of intravenous fluids may damage or overwhelm the lungs and subsequently produce cardiac failure through venous overload. Dilution of the plasma protein by the use of intravenous saline, physiologic sodium chloride, lowers the osmotic pressure of circulating blood, and fluid is allowed to escape from the capillaries and to aggravate an already existing pulmonary edema.



Accidental deaths compose 7 per cent of all deaths. The upgrading of accidental deaths by "working years lost" is due to the increasing control of medical science over pneumonia and tuberculosis, both of which outranked accidental deaths by working years lost in 1930. The general reason for the upgrading of accidental deaths is the tremendous increase in the number of people who live on to the older ages instead of dying at the younger ages, as would have been the case at the turn of the century.—FRANK G. DICKINSON.

## A Project for the Michigan Foundation for Medical and Health Education

By Louis J. Hirschman, M.D.  
Detroit, Michigan



IT WAS a beautiful sunny day, and in the small Northern Michigan city, holiday spirit prevailed. Flags and bunting draped the buildings; brass bands were playing martial music, and the streets were lined with gaily bedecked, happy and laughing people. As the strains of the marching

music neared the vantage point, at the city hall, the crowd broke into loud cheering.

It was a curious and unusual parade. Following the band were many mothers, pushing perambulators and go-carts filled with infants and young children. Another division of the parade consisted of walking school children from the lower grades, and, behind them, sturdy youths of high-school age, and gradually happy couples, some wheeling perambulators and others trudging along in not-too-military formation.

Bringing up the rear were many couples in their middle age, and last, but not least, a shiny new automobile in which was seated the guest of honor, the man to whom all this festive occasion was dedicated. He was the beloved "family physician" and close friend of all of these people.

The procession was formed by most of the laughing babies that he had brought into the world and, in a number of cases, two generations of the family. This was "Cameron Day" in Alpena. In the South in a neighboring suburb of Greenville, South Carolina, a similar celebration was being held to honor the beloved family physician, Dr. F. Jordan.

As the son of a "country doctor" who was born and who lived until adolescence in a small community, I have many memories of happy occasions in which the family doctor and family friend were honored, always beloved by friends and neighbors. The country doctor occupies a unique position in

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his relation to his friends, neighbors and patients. He is not only the medical practitioner who delivers their babies, mends their wounds and hurts, and gently closes the eyes of those who have passed on, but is often the family confidant and advisor as well.

He treats, and usually cures, many domestic and family problems and maladjustments, and often salvages a happy home life. Does anyone in this audience recall any such position of preferment occurring in the lives of any family physician in the large cities?

On account of the lure of the city and the false values placed on specialty board certification, the vast majority of recent medical graduates have not even considered the joys, benefits and advantages of living and practicing in a small community, where everyone has a smiling, hearty hand-grasp for "Doc."

It is our duty as members of a profession, second only to the clergy, to help our fellow man. To do this we must join hands with other agencies to make it possible for young practitioners to settle in small communities, in order to give their inhabitants the same quality of good medical care that our friends and neighbors in larger communities enjoy. With the assistance given to states and counties by the Hill-Burton Act, over 100 communities have small hospitals and medical centers under construction, in order to provide for the needs of patients in their immediate neighborhood.

The majority of these hospitals are located in communities with populations below 5,000. These provide the young practitioner with laboratory, radiographic and other hospital facilities, heretofore unavailable. It is an astonishing fact that, according to a recent report by the dean of one of our medical schools, out of 6,000 prospective medical students only six gave an R.F.D. address as their home.

There has been an acute and growing awareness, in most of the cities in the Union, of the serious lack of proper medical care in rural communities; and state societies are taking some action to remedy the situation. There are a great many things to be done in this connection. I should like to commend to your notice several plans which may be employed to assist in encouraging recent graduates to locate in our small communities.

1. Scholarships should be provided early, even in the premedical schools, to assist young men who will agree to spend at least five years in general practice in a small community. These scholarships can be either out-and-out grants or loans at a low rate of interest, or interest free, to be paid within a certain period if financial circumstances permit, but the collection of which would not necessarily be pressed.

2. Preceptorships for medical students as early as the junior year, where the student can spend, at least, summer vacations with a qualified general practitioner in a small community.

3. A series of talks by qualified general practitioners in rural communities to groups of junior and senior medical students as well as to groups of interns and residents. These talks, in medical schools, should be a definite part of the curriculum.

4. Early contacts by the medical societies at the state or county levels with various representatives of agricultural groups, state Granges, local businessmen's associations, women's clubs and other interested groups, with the idea of supporting legislation, as has been done in several states, so that state aid be made available for men who wish to practice in rural areas.

5. In some of the southern states this has been worked out so that loans without interest have been available to these men, and in others appointments as part-time health officers, in one state at least, at a salary of \$1,800 a year, have been available. In another state, the state agricultural association and the state medical society have joined together and have raised a fund to subsidize young men who have agreed to spend at least their first five years in general practice in small communities.

6. In the state above mentioned, Illinois, the state agricultural association joined hands with the Illinois State Medical Association with the idea of each raising \$50,000 to start their program. This was heavily oversubscribed, so they started with \$150,000.

7. A splendid opportunity to plant the seeds in the minds of young people, who have not decided on a future career, is in their high-school years. One or more talks to rural high-school students delivered by a general practitioner of their own community would start them thinking about the medical profession as a life work. Certainly, in the pre-medical courses, this should be a "must."

8. In some states legislative action has already provided for scholarships for medical students, commencing with their freshman year. The student is required to sign an agreement that he will engage in general practice in a rural community, not exceeding a population of 5,000, and preferably in his own home county.

9. If such a scholarship is accepted, the student must agree to spend as many years in rural practice as he has accepted assistance from scholarships. He is expected to repay this grant, over a period of years, at either a low interest rate or no interest at all. In at least one state this loan is made available for one applicant in each of its sixty-four counties.

10. In order to secure some information as to the present thinking of our medical students, I would sug-



gest that a carefully prepared questionnaire be sent to every student in both of our medical schools, as to their expectation or willingness to practice in a rural community.

11. Medical schools in several states are developing an exchange service, by which interns and residents are sent to affiliate hospitals in small communities for several months. This exposes them, to a certain extent, to contact with rural physicians as well as those practicing in small cities.

12. This is a fine gesture, but it does not go far enough. The young physician must learn the art of medicine as it is practiced by the bedside in the patient's home. This can be acquired only by making daily rounds with the general practitioner and observing what he does and how he does it in the home as well as in his office.

13. A number of hospitals have created a special service in general practice. A rotating internship in such a hospital, if followed by some association with a preceptor in general practice, would make a wonderful preparation for the general practitioner.

There are many other suggestions which could be offered but on account of the time limitation placed on this presentation, one cannot offer them at the present time.

Whether we in Michigan wish to request state aid in our project, or combine with other organizations, or do it alone, is a matter which must be given serious consideration. It is noted that in several states, funds have been provided by a well-known Michigan Foundation to assist in a similar project. I see no reason why the same Foundation would not be of great assistance, in this connection, in their own state. I would urge that consultation with this Foundation be requested in the very near future.

If and when the Hill-Burton Act has been made applicable to our Michigan situation, and a number of small but well-equipped hospitals are located in small communities, country practice will be made more enticing to young practitioners who have been accustomed to modern hospital facilities. Funds should be available to allow rural practitioners to take time off, periodically, to attend refresher courses in medicine.

The unwarranted emphasis placed on the development of specialties has resulted in many young men being deflected from general practice to specialties. It has been estimated that one specialist for every four general practitioners in the country is the maximum proportion that is necessary. Today the proportion of young men seeking to become specialists is more than 40 per cent of the graduates.

If and when the specialty boards insist on a period of five years of general practice as a requirement

for specialty training, a much higher grade of specialists will develop and a number of men would realize, during those first few years in rural communities, that they are much happier and much better off by continuing in general practice. This would cut down the number of "hot-house" specialists who jump from a hospital residency to a limited specialty.

A practical method by which this program can be started in the near future is for those of us who are in a financial position to do so, to subscribe to a fund which will be used as a revolving loan fund for both students and interns, to facilitate their loaning in rural communities to practice general medicine. After the first five years, when many if not all of these loans will be repaid by the recipients, the revolving fund will be perpetuated.

One way in which repayment can be facilitated is for each recipient to insure his life, in favor of the Foundation, in the amount of his indebtedness for the whole term. The premiums for this insurance should be paid by the Foundation.

We in Michigan have developed a fine nucleus in our Postgraduate Foundation. Here is an opportunity for those, both in specialty and general practice, who have been successful in their profession, to assist in furnishing adequate health service to those communities which are, at present, struggling without the proper medical care, and, in many cases, have been forced to rely on the dubious practices of cultists.

As conservers of the public health it is our duty to use every effort and means possible to supply this great need and keep the practice of medicine in the hands of the family physician, and to repudiate every argument for any type of political medicine or regimentation of medical practitioners by any governmental program.

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## PRE-ANESTHETIC MEDICATION

(Continued from Page 41)

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# Diagnosis of Acute Anterior Poliomyelitis

By Franklin H. Top, M.D., M.P.H., F.A.C.P.

Detroit, Michigan



**P**OLIOMYELITIS is an acute communicable disease caused by a virus which affects the brain and spinal cord. The disease is highly infectious. Many persons develop a subclinical or mild, indeterminable infection; in others, clinically recognizable disease is produced, but few af-

ected individuals develop paralysis. From epidemiological, immunological, and bacteriological evidence, it would appear that a majority of an urban population have been infected at some time during their lives. In this geographic area, the north central states, poliomyelitis occurs principally in summer and fall. Children are more commonly affected, but a greater proportion of cases are noted in teen-agers and among grown-ups than

Three stages of the clinical picture of poliomyelitis are noted, namely, the systemic phase, the central nervous system phase, and the paralytic phase (Fig. 1). The central nervous system phase may be further subdivided into early and late components. The incubation period varies between one and twenty-one days, but the majority fall between three and ten days. In the systemic phase of the infection the symptoms may be indistinguishable from those noted at the onset of any acute, moderate, general infection. Headache appears early and is likely frontal. Nausea is present and the patient may have diarrhea or be constipated. Fever is generally of low grade, in the neighborhood of 100° to 101° F. and seldom exceeds 104° F. Often there is mild injection of the pharynx with slight pain. The duration of the first phase is twenty-four to thirty-six hours. The great majority of patients exhibit no further symptoms and in such instances are not diagnosed clinically unless there is evidence of contact with a known case or when an outbreak is present in the community. Even then the diagnosis is presumptive. Cases terminating in this manner are rather common during the mid-portion of an epidemic and from a public health standpoint should be reported as either suspicious or definite.

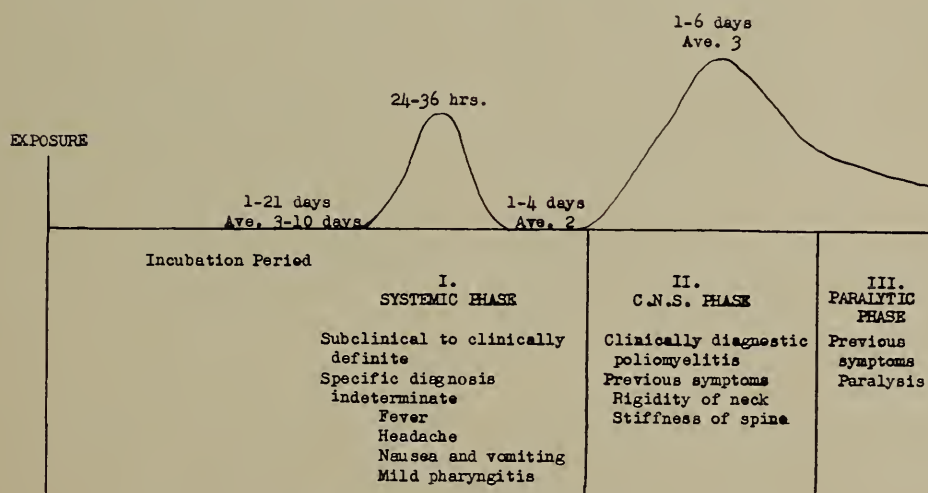


Fig. 1. Clinical nature of poliomyelitis.

heretofore. The disease occurs both sporadically and in epidemic form. Mild cases may remain undiagnosed because they are not determinable clinically, particularly if incidence in the community is sporadic.

A small number, roughly 20 per cent of those falling ill, progress to the central nervous system phase, but following the initial symptoms there is a so-called lag phase of two to four days, during which disease manifestations are absent, and following which there is an exacerbation of symptoms noted in the systemic phase. Thus, the tem-

Dr. Top is Director, Herman Kiefer Hospital, Detroit, Michigan. Presented at the Second Annual Michigan Postgraduate Clinical Institute, Detroit, March 13, 1948.



perature may be slightly higher, the frontal headache more severe, and nausea replaced by vomiting. There may be a moderate degree of drowsiness and of irritability. The facies of the patient belies the moderate fever for it is anxious and has sort of a "whipped dog" expression. In addition, hyperhidrosis and hyperesthesia are present as evidence of vasomotor instability. Hyperhidrosis or excessive sweating is most pronounced about the head and neck. Hyperesthesia is often so marked that touching the skin is unpleasant to the patient and is resented by him. The symptoms and signs noted are those found in the early central nervous system phase and, to this point, only intimate central nervous system involvement. Progression to the late central nervous system phase is indicated by rigidity of the neck or back or both. Rigidity of the neck is termed "stiff neck," and stiffness of the back is evidenced by the so-called "spine sign." "Head drop" may also be found, as well as fine tremors, observed especially in an extremity in which weakness or paralysis develops. Rigidity of the neck can be demonstrated with the patient in a supine position by placing the examiner's hand under the head and attempting to flex the head on the chest. When neck rigidity is present, the entire body comes up when the maneuver is attempted. Stiffness of the back is best demonstrated by asking the patient to sit up unassisted; when he does so he cannot readily raise himself upright from the supine position without the use of one elbow and the hands in what appears to be a lateral climbing upon himself. When accomplished, the sitting position is maintained by the patient using his arms beside or behind him as props. "Head drop" is elicited in the supine position by grasping and lifting the shoulders with the head resting on the bed, the sign being positive when the patient is unable to flex the head on the chest.

The third or paralytic phase is characterized by weakness of varying degree and extent and by frank partial or total flaccid paralysis of one or more muscles or groups of muscles. Muscle pain is not found constantly, and the same is true of muscle spasm. When present, muscle pain is of relatively short duration, hours to days, whereas muscle spasm lasts for a longer period, measured generally in weeks.

The clinical types of poliomyelitis may be divided into the nonparalytic and the paralytic, the latter being further subdivided. Nonparalytic poliomyelitis is recognizable disease unaccompanied by

weakness or paralysis. In this group would be included the abortive type, diagnosed only because of association with a recognized case. The paralytic types include spinal, bulbar, spinobulbar, encephalitic, meningitic, and the ataxic or cerebellar. In the *spinal* type, one or more muscles are affected because anterior horn cells in the spinal cord have been invaded. Involvement is generally spotty and complete paralysis of an entire extremity is the exception rather than the rule. More than one extremity may be touched, with lower extremities elected more commonly than the upper. In the *bulbar* type, one or more of the cranial nerve nuclei are affected. The nuclei of the first, second, fifth, and eighth cranial nerves (smell, vision, mastication and hearing) are rarely touched. The third, fourth, and twelfth cranial nerves (intrinsic and extrinsic muscles of the eye and muscles of the tongue) are infrequently attacked, whereas the seventh, ninth, tenth, and eleventh (facial expression, palate, pharynx, larynx, and accessory muscles of respiration) are commonly affected. In the *spinobulbar* type, there is involvement of one or more cranial nerves and of segments of the spinal cord. *Encephalitic*, *meningitic*, and *cerebellar* types are uncommonly noted. In general, one or two patients in each category are seen in an outbreak numbering from 100 to 500 patients. Unless these rare types occur during a poliomyelitis outbreak, their relationship to this infection may be lost. The diagnosis is possible during an outbreak generally only because the patient has been associated with another case.

A patient in whom the systemic and central nervous system phases are present is said to show the dromedary phenomenon. In many patients the systemic phase is neither noted or elicited by history, the central nervous system phase apparently being the first manifestation of illness. In a few instances, the first two phases may be absent and the earliest indication of illness is the presence of weakness or partial or complete paralysis of one or more muscle groups.

The diagnosis of poliomyelitis in the late central nervous system phase is aided by lumbar puncture. This procedure is not attempted until definite signs and symptoms of central nervous system disease are evident, for early puncture may vitiate subsequent spinal fluid findings. Examination of the spinal fluid reveals a pressure which is normal or increased. The appearance of the fluid may be clear or hazy depending on the number of cells

which, in general, range between 15 and 500; higher counts up to 1,500 have been noted. Early the type cell found is the polymorphonuclear leukocyte, while later lymphocytes predominate.

3. *Irrationality or coma* are infrequently noted in poliomyelitis because they occur only in the rare encephalitic or meningitic types. Irritability is common in serous or suppurative meningitis, and

TABLE I. EXAMINATION OF SPINAL FLUID

	Appearance	Number of Cells	Predominant Cells	Sugar (Mg. per 100 cc.)	Bacteria
Normal Poliomyelitis	Clear Clear, sometimes slightly hazy	0-10 15-500	Lymphocytes Very early— neutrophiles Later— lymphocytes	50-80 50-80	None None
Encephalitis	Clear	15-500	Lymphocytes	70-110	None
Tuberculous Meningitis	Clear—fibrin web	15-500	Lymphocytes	60-10	Present
Syphilis, cerebrospinal	Clear	10-500	Lymphocytes	60-10	None

The spinal fluid protein is slightly elevated in most instances but may be markedly higher, the normal range being 15 to 45 mg. per cent; the sugar determination is generally within the normal range of 50 to 80 mg. per 100 ml. No organisms are found in the fluid. A comparison of the findings of the spinal fluid in poliomyelitis with those noted in other common infections is shown in Table I where normal fluid is contrasted with that found in poliomyelitis, encephalitis, tuberculous meningitis, and cerebrospinal syphilis. The pathological conditions listed in the table are all of the serous type, that is, the predominant cell type is the lymphocyte. The variation in the number of cells is similar, but whereas in poliomyelitis the spinal sugar determination is within normal range, in encephalitis it is likely to be high normal or above normal, and tuberculous meningitis and cerebrospinal syphilis show low sugar determinations.

The diagnosis of poliomyelitis is often fraught with difficulties, and there are certain clinical signs and symptoms which discount the diagnosis of poliomyelitis. Briefly they are as follows:

1. *Upper respiratory manifestations.* Acute tonsillitis or pharyngitis with a high temperature and severe headache may lead one to suspect poliomyelitis. The sore throat encountered in the systemic phase of poliomyelitis is usually mild, the temperature elevation is moderate, and stiff neck, stiff back, or both are present.

2. *Marked cervical lymphadenitis* does not accompany poliomyelitis. It is noted in the acute stages of diphtheria, scarlet fever, streptococcal sore throat and in infectious mononucleosis, in tonsillitis or peritonsillar abscess, and in serum sickness and leukemia.

coma in encephalitis, cerebral accidents, cerebral manifestations of acute nephritis or diabetes.

4. *Convulsions* are uncommonly observed in poliomyelitis but may occur at the onset of a severe infection such as pneumonia, be present in tetanus and in noninfectious conditions such as acid-base imbalance, tetany or epilepsy.

5. *Meningismus* is noted early in the course of a toxic infection such as pneumonia or bacillary dysentery and is a transient phenomenon which disappears within eighteen to twenty-four hours. There is a mild meningeal reaction, accompanied by moderate stiff neck or back. The spinal fluid pressure is usually markedly increased and spinal drainage greatly relieves the condition. The cell count is normal or slightly elevated (10 to 50 cells), while the spinal fluid sugar and protein determinations are within normal range.

6. *Marked temperature elevation* is not often found in poliomyelitis except in the terminal stages of the bulbar or spinobulbar types. A high or septic type of fever is noted particularly in typhoid fever, otitis media, and pyelitis among others.

7. *Severe pain or swelling* of affected extremities are not indicative of poliomyelitis. Muscle pain may be severe, but pain referred to bones or joints should lead one to consider rheumatic fever, osteomyelitis, epiphysitis or arthritis.

8. *Abdominal tenderness* which is generalized may occur in the system, is a phase of poliomyelitis and is likely due to swelling of mesenteric lymph nodes. The condition is early and transient; persistent tenderness should lead to a consideration of typhoid fever, dysentery, colitis or peritonitis. Localized pain in the abdomen referred to a quadrant



should make one suspicious of appendicitis, diaphragmatic pleurisy, gall-bladder disease, kidney infection, or inflammation of the female generative tract.

9. *Sensory disturbances* of a severe grade are not frequently encountered in poliomyelitis. Occasionally sensory disturbances are present, but most often given orally. If they are to be used on such as transverse myelitis and toxic neuronitis or Guillain-Barré syndrome. In the latter instance, both motor and sensory paralysis occur without the presence of an acute infection; the patient is generally afebrile, and examination of the spinal fluid shows normal constituents with the exception of high protein levels.

In conclusion, the following points should be considered as factors in the diagnosis of early poliomyelitis.

1. *Epidemiological evidence.*—

(a) *The season of the year.* In this geographic area, poliomyelitis generally occurs in summer and fall.

(b) *General prevalence of the disease.*

Lack of many cases does not remove the possibility of poliomyelitis but makes its consideration less likely. Has the patient been in contact with a known or suspicious case?

2. *Clinical and laboratory findings.*—Does the clinical picture conform to that generally noted in poliomyelitis, and are the spinal fluid findings in keeping with the diagnosis?

3. *Public health regulations.*—Poliomyelitis is a reportable disease, and in instances where the diagnosis is in doubt, it is desirable and preferable from the standpoint of the public health to report the case as suspicious poliomyelitis until further evidence makes a final diagnosis possible.



In a study of deaths for 1930, 1935, 1940 and 1945, Frank G. Dickinson, Ph.D., and Everett L. Welker, Ph.D., demonstrated that even though heart disease kills four and one-half times as many people as accidents, it does not destroy as many working years, because the average age at death from heart diseases was sixty-seven in 1945 and from accidents only forty-five. Heart diseases in 1945, however, destroyed twice as many "unrealized" years of complete life expectancy as did accidents. Dr. Dickinson and Dr. Welker call their two new measures "life years lost" and "working years lost."

## First Aid to Patients with Head or Spine Injuries

By John E. Webster, M.D.  
Detroit, Michigan



IN ASSESSING the subject of first aid to the injured, it may be well to present a typical example of a cranial injury and a typical example of a spinal cord injury. It may then be possible to discuss, rather briefly, the cardinal principles of care in each of these instances. More details can then be presented later, as desired.

### Cranial Injury—Compound Fractured Skull

This patient usually requires immediate attention, and his injury is of a dramatic type and therefore calls into action the services of the doctor who must in short notice define the general principles of management. This type of injury is therefore distinguished from the closed injury, where the main feature of care is rest of the patient. The patient may, in this latter instance, merely be hospitalized, treated by bed rest and general supportive treatment. No unusual decisions are required. The patient with compound fracture of the skull may or may not be unconscious. He often presents a considerable degree of hemorrhage, thus, usually exciting those who are about him. Although bleeding from the scalp is lessened when the head is in the upright position, the patient may be shocked by the injury, manifesting a primary type of shock. It is therefore indicated to place him in a supine position. A second step is that of determining the extent of the laceration of the scalp and the degree of underlying damage. This can be appraised first by a wide shaving of the hair in the involved area. This particular step is most important, and the shaving must be carried out with thoroughness. Soap and water should be used as the hair is removed by a sharp razor blade, which may be applied by holding the blade in a hemostat. Clippers are of value in clipping the hair prior to the shaving. The wound itself may be protected by means of a sterile sponge.

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After the scalp has been carefully shaved, the entire area is prepared with tincture of green soap and water. Alcohol and ether are then applied. The laceration itself is not included in this preparation. If bleeding is profuse it is always possible to control the bleeding by pressure of the scalp against the bone. The vessels which bleed are in the galea, and such pressure usually produces hemostasis. It may be necessary to place a hemostat in the area of laceration. This hemostat should be placed on the galeal layer and simply reflected backward. The hemostat may not necessarily be placed upon the bleeding point to control the hemorrhage. With a sterile glove covering the hand, a finger is then placed within the laceration. The tip of the finger may only be necessary in a small wound, or in a larger area the entire finger may be inserted gently under the scalp, in order to determine the amount of bone which has been comminuted. This step cannot be over-emphasized since it gives a maximum amount of information. If there is evidence of comminution or depression, the patient is then considered a surgical emergency, requiring debridement of the wound probably within the next twelve hours. If there is no underlying bone damage, the laceration may be superficially debrided and the scalp closed with interrupted silk sutures, after irrigation with warm saline. It is preferable to close the scalp in two layers, although this, in small wounds, may not be necessary.

On the other hand, if there is underlying bony damage, x-rays of the skull are made to evaluate the degree of depression and the degree of comminution. It is not uncommon to encounter an intact outer table of the skull in a compound fracture with rather severe degree of comminution of the inner table. It is for this type of injury that x-rays of the skull are most valuable, since palpation alone may not reveal the entire damage. It is important that roentgen studies of an excellent quality be made, since it is possible to detect bone fragments which may be indriven through the dura into the brain only by the best radiological technique. Blurred films or films made while the head is moving are of little if any value in determining the extent of damage produced.

If considerable damage exists, the patient must then be treated under favorable neurosurgical conditions. These conditions must employ modern facilities, and blood must be available. A Bovie and

suction apparatus are essential. The technique of management includes careful debridement of the scalp and the removal of all bone fragments which are comminuted and depressed. Care must be taken to remove as little bone as possible; particularly is this true of lesions in the frontal area, where every effort must be made to avoid deformity. The dura is then debrided as is the underlying brain tissue. Hemostasis is effected. The dura is then closed by means of a patch of pericranium or of temporal fascia, as indicated. It is often possible merely to suture the tear in the dura by several silk sutures in the less severe grades of injury. Penicillin, 10,000 units, is then instilled into the site of the wound before closure of the scalp in two layers with fine interrupted silk sutures. The patient is then treated by systemic penicillin.

General principles of care of the patient with a head injury and scalp laceration, which may or may not be complicated by a compound fracture, require attention to several other general principles. It must be determined that there is no associated damage besides the injury to the cranial vault and underlying brain. It is not uncommon to have associated chest and abdominal injuries. Attention must be given to the patient's airway to insure that he, particularly if unconscious, has no obstruction to the upper air passages. Occasionally these patients vomit, and aspiration of the pharynx and the trachea may be required. It may be necessary to remove mucus in the acutely ill patient who is developing pulmonary edema. Due to loss of blood from the scalp laceration these patients may present a pallor and shocked appearance which may be suitably treated by means of transfusion or the use of plasma. Oxygen by nasal catheter rather than a tent may be helpful.

A careful neurological examination should be made as soon as possible and the time of the examination recorded on the chart. This is for later purposes in detecting any progress in the patient's neurological status. In the unusually restless patient, sedation may be required. This sedation is most suitably administered in the form of codeine, gr. 1, and sodium luminal, gr. 1. These can be alternated every four to six hours, and the patient is usually made more co-operative. To insure comfort, it is important that the patient does not have a distended bladder, that he does not lie in a wet bed, that he is not disturbed by noise and unnecessary attention.



Careful observation of vital functions is an important early aspect of care. Recording of the pulse and respirations every half hour, blood pressure every hour and the temperature every two hours, is a valuable step in detecting subsequent complications.

### First Aid to Patients with Injury of the Spine

It may probably be stated that the early first aid treatment of patient with injuries to the spinal cord and cauda equina is the most important phase of care. The primary damage of the accident exists as the patient, for example, lies on a street after having been struck by an automobile. Secondary damage, however, of a profound nature may be produced as the patient is moved from his original position. Great care must be exercised to avoid such secondary damage. This may best be accomplished by moving the patient only by means of a stretcher and only in a position of hyperextension. Hyperextension is readily provided by placing the patient in a prone position on the stretcher.

It becomes important that those responsible for transportation of the injured determine whether or not power is present in the extremities. In an unconscious patient when this is impossible, a prone position is still a favorable position.

Upon reaching a hospital a closed spinal injury may require but little emergency supportive treatment. These patients are seldom profoundly shocked. They require a careful examination to determine the extent of the neural damage. This examination can be carried out by means of a pin which will show a level of anesthesia. Power can be simply tested by stimulating the patient with a pin or by asking the patient to move his extremities. If the patient presents a paralysis, x-rays of the area of involvement become important to determine the extent of the bony damage.

Open injuries of the spinal cord or cauda equina may present a clinical picture of a profound systemic disturbance through hemorrhage and through associated injury. Some 40 per cent of thoracic open spinal injuries are associated with hemothorax or pneumothorax. Some 30 per cent of lumbar spinal injuries are associated with injury to the kidneys, retroperitoneal space or the bowel. In both the open and closed injuries a spinal puncture with a Quackenstedt examination

*(Continued on Page 56)*

## Feeding Problems in Infancy and Childhood

By Frank Van Schoick, M.D.  
Jackson, Michigan



**F**EEDING PROBLEMS in infancy and childhood begin very early. The maternal diet and state of nutrition may materially affect the child. The effects upon the fetus of various deficiency states and metabolic disorders in the mother are familiar to all of us. This is not a primary pediatric prob-

lem but a secondary one with which we must be familiar in order to appreciate some of the problems of nutrition in the newborn infant.

When a child is born he is separated suddenly from his food and oxygen supply. The need for both is urgent but that for oxygen is critical so he "hollers and gets it." The need for food is less urgent but none the less vital. He cannot "holler and swallow at the same time so he quits his hollering and goes to swallowing." These are two terribly important decisions the newborn must make, and make correctly or he cannot live. Fortunately nature has provided him with reflexes which are instinctive and compelling forces to maintain life. After the newborn establishes and differentiates these two important reflexes it is the physician's duty to adjust properly the food to suit the baby's capacity and tolerance.

In this connection it is important that we appreciate the necessity of allowing the newborn to have adequate time to practice differentiating these two reflexes. I believe nature has provided that time in not having breast milk available until about the third day. She has protected the newborn against undue fluid and energy loss in this period by a low metabolic demand for energy as well as fluid and electrolytes. As a matter of fact if cow's milk mixtures are fed in the first three days we not only add mechanical risks to the infant but large amounts of calcium are washed out and phosphorus is retained. This contributes to irritability and hypertonicity. Therefore, it would

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seem we might learn a lesson from nature and withhold food until the third day.

If the newborn is fortunate, he has the food nature provides for him—*breast milk*. Breast feeding represents one of the more serious challenges to the physician, not so much as to the technique of feeding but more as to the willingness of the mother to nurse her young as nature provided. We find many, too many mothers who enter the hospital with the preconceived decision not to nurse their babies. This may be due to many factors, only a few of which are important contraindications for nursing. It might be timely to merely list a few factors which influence mothers in this respect: (1) fear, (2) false modesty, (3) improper preparation by the obstetrician, (4) selfishness, and (5) not wanting the baby. Time does not permit the discussion of these factors, but we readily admit their influence on the mother. On the opposite side we find many good reasons for the mother to nurse her baby. Again to list a few: (1) healthier baby, (2) happier baby, and (3) certainly a much better emotional adjustment in the home, which may in turn be reflected in the baby's development for years to come.

I emphasize these factors to urge all of us to appreciate thoroughly the problem of breast feeding and the challenge it implies. We may successfully feed a baby from a bottle, but we cannot in any way substitute for the emotional security and stability of an infant suckling at his mother's breast.

The less fortunate newborn who is denied breast feeding must be fed on some cow's milk modification. It must be a modification because cow's milk was made for calves and not human babies. The prescription should recognize the needs and limitations of the newborn. I have suggested the importance of withholding food until the third day. During this time his thirst may be satisfied easily with plain water. A simple hydrating solution is a mixture of 10 per cent glucose in Ringer's solution. This provides water, electrolytes and metabolites in a simple media which is well retained, and offers the minimal risk of aspiration if the baby's "hollering and swallowing" get mixed up.

The first formula for the newborn should be low in caloric value because the little fellow has not awakened from his long winter's nap. His needs are small and easily satisfied. Here, a high protein, low fat, moderate sugar feeding is quite satisfactory. Such a formula for a 7-pound baby

might be about like this: whole milk, 7 ounces; skimmed milk, 7 ounces; sugar as represented by dextri-maltose, 5 tablespoonfuls, and water to make 18 ounces of formula. The milk will be boiled three minutes and strained to remove the clabber. Feedings of 2½ ounces are given seven times daily. It is quite satisfactory and sometimes desirable to allow the infant to choose his own schedule at first.

Such a formula satisfies his low caloric needs and recognizes the desirability of high protein feeding. Of all the food elements in a child's formula, fat is the greatest trouble maker. It is poorly tolerated, imperfectly digested and absorbed, and because of its high caloric value may take the place of nutritionally more important foods.

When the infant awakens from his long winter's nap, his metabolic processes increase abruptly and he needs more food. The sugar can be increased by one and probably two tablespoonfuls, and as soon as the stools are firm he can probably tolerate a stronger formula. Such a formula for an 8-pound baby would be: evaporated milk, 8 ounces; sugar, 1½ ounces, and enough water to allow the infant 2½ to 3 ounces of fluids per pound per day. In general, the formula can be increased by allowing 1 ounce of evaporated milk per pound per day, with a ceiling of 13 ounces (one tall can), keeping the sugar constant at 1½ ounces and increasing the water slowly to a maximum of 17 ounces, making at most a 30-ounce formula for any twenty-four-hour period. Beyond this point the infant's needs are met by other foods.

Relative to the timing of additional foods, I should like to urge you to give them when the baby is *hungry* and not try to race with your contemporaries or the bridge partners of the child's parent. Whether one begins with a cereal or vegetable is a matter of choice, the important consideration being hunger on the part of the child and gentleness on the part of the mother or attendant. A "take it or leave it" policy is highly productive of success here as well as in the older child. As a rule, fruits should be given later because of their high degree of acceptance. If given first the baby is apt to think all other foods should taste as good.

Meat has become available for the infant in the form of strained lean meat. This can be added to the vegetable feeding and is very well accepted and tolerated. Its addition to our diet materials represents one of the most valuable sources of much



needed protein and minerals. In the short time meat has been available I have noted a significantly higher floor to the hemoglobin levels in the second six months of the child's first year.

The next feeding problem in the normal child is not so much one of food as it is one of technique and management. I refer to weaning. Weaning should represent that time in the child's development when he is ready to be kicked out of the crib; it is that time when he no longer is an infant but a little child; that time when he should make much greater adjustments in his surroundings; that time when he no longer is a star boarder but a member of the family; that time when he no longer is characterized by a "gimme" or new deal personality but is a more aggressive self-reliant fellow. I know of no way to put a period more effectively to all these things which characterize the crib personality than to stop the one thing which most typifies infancy—suckling.

To my knowledge, the human female is the only mammal who will suckle her young after she has been bitten. I offer this statement as a natural suggestion to guide us in choosing the time to wean our human babies. It is my practice to wean babies at about nine months of age, slightly more or less. The success is dependent to a much greater degree on the mother and family than upon the child. The success in any case is very high, but if the mother is ready to have her child grow up a little the success is almost universal. In this respect I frequently tell the mother the changed schedule is more of a nudge to her to allow the child to do "what comes naturally" than any drastic change in food. I usually urge the mother to be extra kind and sympathetic for a few days to compensate for the baby's cumulative loss of the old friend, the bottle or the breast.

Before going on to special feeding problems, I must say a few words about the run-about or pre-school child. From the age of two years to six years, growth is on a low plateau. In this age group the need for food is surprisingly low and the appetite poor to match—poor only to the parent as judged by the adult standard. The child of this age is characteristically a "spree" eater; he will eat one good meal out of several and be perfectly happy and active. One must occasionally limit his choice of foods to the nutritionally important ones, avoiding those which are essentially fuel foods. The problems involved in feeding this child are large-

ly those of helping him against his parents, who continually urge him to eat more than he wants and needs. After this situation is well appreciated by the parents, the emotional tension in the home and particularly at the dinner table drops to a minimum.

The premature infant curiously enough does better on a low-fat cow's milk mixture than on breast milk. His need for protein is high, and his ability to digest it is equally high. His need for fat is low, and his ability to digest and absorb it is equally low if not lower. His need for sugar is moderate, and his ability to utilize it is high. His need for calcium and iron is high, but his ability to absorb either is somewhat dependent upon the total amount of other large molecular substances in the diet, particularly fat. In the presence of high-fat content in the diet, calcium particularly is absorbed with difficulty. This seems like another good reason to keep the fat content low in any formulas for prematures as well as for older infants. Such a formula, high in protein and calcium and low in fat, with average sugar, for a 4-pound premature would be: whole milk, 2 ounces; skimmed milk, 7 ounces; dextri-maltose, 5 tablespoonfuls, and water to make 12 ounces of formula. The milk must be boiled and strained or, better yet, autoclaved. The need for vitamins must be met very early and can be satisfied by a water-soluble powder called a vitamin dispersion. The need for iron is well accepted, but I have been unable to meet it without doing more harm than good. Small transfusions seem to be the best method of combating the anemia so common to prematures.

At this point, a few words relative to feeding technique are in order. The infant should be permitted to nurse if possible and if he is not too fatigued by the process. If he is very weak and lethargic, gavage feedings seem best. This conserves his energy and minimizes handling and exposure.

The crying, colicky infant is always a problem to parent and physician alike. He is most likely less than three months old and usually less than one month. His pain may be due to a true gastro-entero spasm (colic) of allergic origin, but more often it is due to the hyperalimentation of indigestion or is the idiopathic form found in the well-nourished and otherwise healthy child. The solution of this problem is urgent, more from an emotional point of view than a physical one.

The young parents who have made all sorts of plans for their child find themselves with rapidly diminishing ardor for parenthood. Where they expected all love and happiness, they find noise, crying, fatigue and frequently resentment. For two cents they would "give their infant back to the Indians." It is reported that the crying infant injures his own personality. This I do not know, but I am certain he plays havoc with his parents.

Milk is the usual offender in the allergic group of crying infants. Treatment here necessitates the trial diet or elimination diet procedures familiar to all. The ones in whom indigestion is the main factor require detailed study of eating habits, air suckling, and quality of digestion as measured by the stools. As a rule, if one prescribes a diet used for a premature, success will usually reward his efforts. For the group of crying infants who are well nourished and show no evidence of indigestion, and where emotional problems in the home are ruled out, one is justified in quieting the hyperalimentation with medication. The usual method is mild barbiturate sedation with atropine. I prefer to use phenobarbital and belladonna. I consider belladonna superior to atropine because of the other alkaloids besides atropine. There should be no apprehension over the possible habit-forming characteristic of phenobarbital. Improvement is rapid and marked, and quiet and happiness again prevail in the home. In a matter of a few weeks or at most a few months, medication can be withdrawn.

Feeding the small patient who has diarrhea presents quite a problem. There are two schools of practice. The philosophy of one is starvation, and the other, feeding—in other words, to feed or not to feed. A great many years ago we accepted the dictum of feeding typhoid-fever patients. We are well aware of the improved nutrition and shorter convalescence such management exhibited, but we have been very reluctant to accept feeding as the method of choice in handling diarrhea in infancy and in childhood. This, however, seems an inevitable conclusion when we understand and appreciate the results of well-controlled balance studies. These studies have shown such positive nitrogen and mineral balance with feeding as compared with equally marked negative balance with starvation that this phrase has been coined: "One should be more interested in what the patient gets than what the diaper gets."

As a matter of practical experience I have been impressed with two things as a result of early feeding in diarrheal conditions: (1) the patient is much less toxic and feels and acts much better, and his convalescence is more rapid, and (2) the physical evidence of his disease, diarrhea, lasts longer. From my experience in the last few months, I prefer early feeding to the older starvation method of dietary management of diarrhea. The type of diet is essentially the same as that advised for the premature—high protein, calcium, and sugar and very low fat. Very early vitamin replacement is essential. This applies particularly to the B vitamins.

Feeding the convalescent child is an art in diplomacy and restraint on the part of the attendant as well as the physician. One is never wrong in allowing a child to get hungry before offering food. If there is no desire for food, a search for the cause is in order; otherwise, nature has provided the most efficient means of self-preservation—pain from hunger.

The discussion of the feeding problems of any illness or disease, mild or severe, occurring in childhood, must recognize the special characteristic of this group of patients—growth. Any illness which interferes with nitrogen and calcium retention interferes with growth and leaves its scar upon the organism, a scar which may or may not disappear. Our every effort should be directed at feeding the patient material vital to growth and easily available even in his diseased state. Man is essentially a carnivorous animal and, for the most part, must have preformed protein to satisfy his economy. Nature has made adequate provisions for this by making protein the most easily absorbed food. Along with protein, and equally well tolerated, is the protein saver, sugar.

The diet in most diseases should be high in protein and sugar, and complemented with vitamins, to insure better utilization of both. I know of no common illness of childhood where high protein feeding is contraindicated.

The scope of this paper does not encompass the detailed dietary management of metabolic diseases like diabetes.

### Conclusion

1. Give the newborn baby a chance to get adjusted to independent living before offering food.
2. Breast feeding is the method of choice except in prematures.



3. Prematures tolerate high protein, calcium and sugar diet very well, and fat poorly.

4. The normal infant's formula requirements may be satisfied with 1 ounce of evaporated milk per pound per day, with a ceiling of 13 ounces, 1½ ounces of sugar per day, and 2½ to 3 ounces of fluid per pound per day, with a ceiling of 30 ounces.

5. Addition of complementary foods should await the appearance of hunger.

6. High protein diets are advisable in all common illnesses of childhood, including diarrhea, in order to establish and maintain positive nitrogen and calcium balance, conditions necessary to growth.

419 W. High Street  
Jackson, Michigan



## FIRST AID TO PATIENTS WITH HEAD OR SPINE INJURIES

(Continued from Page 52)

is of value in determining the presence or absence of a block.

Closed injuries are not subjected to a decompression operation of laminectomy in spite of the bony damage unless a persisting block is present. Open injuries are debrided if a block is present or if bony fragments or metallic fragments are present in the spinal canal.

The early general nursing care of these patients is most important. Certain principles must be observed. The patient should be turned every two hours without fail in order to prevent decubiti. These decubiti are usually formed during the early forty-eight hours of care. Second, an indwelling catheter should be placed in the urethra as soon as possible. This should be done under sterile conditions. A tidal drainage apparatus preferably is then attached to the catheter. Third, the patient should never be allowed to remain in a wet bed for longer than ten minutes. Four, the skin must be kept immaculately clean. The bed must be kept in excellent order without wrinkling of the bed sheets. It is preferable that an air mattress or firm mattress be used for these patients. The use of a Stryker frame is usually an invaluable aid in turning the patient. Cervical cord injuries may require the use of temporary halter traction, which may later be converted to traction by means of the application of Crutchfield tongs, which are more comfortable and more effective.

## The Practicing Physician and Preventive Medicine

By Henry F. Vaughan, Dr. P.H.  
Ann Arbor, Michigan



EVERY INDIVIDUAL at all ages of life should be under the continuous professional care and guidance of the family physician and dentist, who should be fortified with the most modern armamentarium for the prevention of illness and the promotion of positive health. In the final analy-

sis it may be concluded that public health represents the summation of personal health. It is the integration of the health protective services accepted by the individual which, in the aggregate, find expression in the tone and standard of health status of the entire community. No city or county can be healthier than the people who live in such areas. The tuberculosis morbidity and mortality rates express the health consciousness of the people with regard to the prevention and control of this disease. The diphtheria and whooping cough death rates have diminished in those places where there is an individual and family recognition and acceptance of protective services. In fact, it may be said with justification that the ideal local unit for health work is the family, as upon the behavior engendered by health information depends the well-being of parents and their children. The family physician finds himself in a most strategic situation in motivating and cultivating family health habits conducive to longevity and freedom from disabling disease. The health counseling by the family physician should be on a continuative basis. Days or weeks sporadically dedicated to personal health matters can never substitute for the conscientious safeguarding of personal health woven into the fabric of daily life.

In our democratic life very little occurs of health benefit to the family unless the parent is convinced of the usefulness and need for the recommended service. Health departments and practicing physicians can be well fortified with the basic scientific information needed for the protection of the grow-

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ing child against diphtheria, but unless we can convince the mother that her baby should have toxoid in the first year of life, we accomplish nothing in the way of securing personal or community protection against this disease. And so in designing our programs for the elimination of preventable sickness and conditions, we must keep foremost in our minds the behavior and attitudes of those whose co-operation we seek. This requires a discerning and understanding comprehension of the social and educational background of families, so that on these attitudes and understandings we may impose scientific principles in terms of ready acceptance which find application in the form of preventive and protective services.

It is obvious that the family, although the ideal health unit, is too small a group to function efficiently in a co-ordinated community-wide health program. And so we see, in addition, two other principal participants in the health program: (1) the family physician, and (2) the community health service. This latter term is used in a broad sense so as to include not only the official health department but also those innumerable non-official agencies which contribute so generously to the objectives of health and social betterment. And so the physician and the health department are both aids to the family health unit, each participating in accordance with its capacity and ability to contribute by providing facilities and services for the family health needs. There are some things that none of us can do well as individuals. We are compelled to safeguard collectively our homes and families against the ravages of fires, pestilence and militant disturbances by the support of fire, health and police departments. We accept a public water supply as one which is safe, potable and free from the danger of typhoid or dysentery. Those of us who live in urban areas must participate in a collective scheme for excreta disposal and disposition of municipal wastes and other matters which are not only objectionable to the olfactory nerve but may also be inimical to health. We establish and accept a community-wide supervision of food, and especially milk, that perishable commodity which when unprotected and unpasteurized leads to so many disturbing illnesses. And all of this we do in our desire to serve the family health unit—the parents and their children.

There are, on the other hand, many health services of a very personal character which not

only protect the family but contribute to the salubrity of the community, services which can be best provided by the physician as family health counselor. In the child's normal growth and development he is exposed to a harsh environment and to many of the accidents of life which impose upon him impediments of a physical and mental character which interfere with his normal growth. If the child remains shackled to these hindrances, he will be deprived of the full opportunities of education, employment and a normal life. The protective services have a very intimate association with mind and body. They are interwoven with the personalities and daily life activities of the family unit. They are unlike the water supply which stands in some nearby lake or reservoir and which must be treated and distributed with due consideration to sanitary necessity. They are quite unlike the milk herd which grazes on green pastures in a locale remote from the family home. They are the services associated with continuous medical supervision, the health examination, the x-ray examination for the early discovery of tuberculosis, the blood test for syphilis, protective treatments against smallpox, diphtheria and whooping cough, the search for those early departures from normal health which foretell the approach of cancer, heart disease or some other disability of the aging process. These are in the truest sense matters of personal health, and as yet there has been no substitute for the qualified friendly family physician, who through the years has served in both curative and preventive medicine with great credit to himself and great satisfaction to the family and public.

In the design of our community health programs it is necessary that we have an understanding of the conditions and viewpoints which contribute to our morbidity and mortality statistics. For this study and diagnosis of the community as a whole there must be individuals trained and experienced in the broad considerations of epidemiology and public health. Here again is a function for the local health department. It must diagnose the community situation. The factual information which forms the basis of such a diagnosis is in part secured from the medical profession. Births, deaths, communicable and preventable diseases are reported, recorded, analyzed and interpreted. Special surveys of the incidence and prevalence of accidents and sicknesses constitute additional diagnostic tools. However, no data of this character



can be sounder than the foundation upon which it is constructed. And so there must be a recording of vital facts with the accuracy of full knowledge and the employment of diagnostic, laboratory, clinical and scientific aids on the part of the family physician who makes this knowledge available to the community agency. While the modern family physician is well trained and disciplined in the art of diagnosis, treatment and prevention of disease in the individual, he is not usually qualified without specialized training and experience to make a community diagnosis. This he leaves to the health director, who will turn to the physicians and the medical societies for advice and interpretation of findings and the development of a program which will fully utilize not only community resources but the latent resources of the family physician, with the expectation that he will be activated to the practice of preventive as well as curative medicine. In this co-operative undertaking the politic health director will not demand participation on the part of the medical profession, nor will he demand anything else; rather will he seek co-operation and understanding participation on the basis of a partnership in a program which leads to the betterment of family and, consequently, community health. The improvement of health is the ultimate goal of both physician and health department. The family physician is not only a purveyor of medicine but he is a promoter of health protection services.

To carry forward effectively such a program of participation on the part of the family physician, it is necessary to have a plan, to adopt rules and regulations which will be agreeable to the majority members of the medical society, as well as to the representatives of the official health agency. Such plans are essential, since in the interests of community health one expands the vista beyond the immediate household of the family served by the practicing physician. These considerations of health improvement impinge upon the citizens as a whole; they involve mass phenomena and broad considerations of epidemiology. For their successful conclusion an understanding agreement and program should be worked out jointly by the medical society and the health department. Preparation involves not only a spirit of co-operation on the part of the participants but an assurance that a certain methodology of plans will be adhered to, and above all it requires the assurance that the professional men who are to render the

service are technically trained, experienced and qualified to handle the problem. To rely upon a physician who is trained and steeped in the traditions of medical practice of fifty years ago and who has not concerned himself with a study of modern practice, and who has not acquainted himself with the newer knowledge which stems from laboratory, clinic and research centers, to participate in the administration of the Schick test, the giving of toxoid, or the examination for early tuberculosis, will be fatal to the planned program. There must be assurance that the parents and children and the public generally are receiving the full benefits of modern preventive medicine, and toward this objective there must be provision for postgraduate and continued education. It should be the joint responsibility of the health department and the medical society to make sure that the physician is not only professionally qualified to render the service, but is understandingly conversant with the complete program of family and community service. The public, in its general ignorance of medical and health practices, does not discern between a qualified and unqualified physician. And so if we are to encourage families to seek the benefits of preventive medicine at the hands of the family physician, there must be no unqualified medical men, and it becomes our responsibility to assure the public that such is the situation. Programs for continued education are being developed extensively by universities. Encouragement has come from various groups, such as the W. K. Kellogg Foundation, the Commonwealth Fund and the Rockefeller Foundation, which have made grants totaling many millions of dollars to schools of medicine, dentistry and nursing. Increasingly, medical societies at state and local levels, as well as public health departments, have participated. Noteworthy was the plan initiated in Michigan in 1928 by the Wayne County Medical Society, Wayne University Medical School and the Detroit Department of Health, which annually brought to postgraduate conferences nearly a third of the registered physicians of Detroit. It was found, however, that this did not suffice. There are physicians in every community who are not wont to attend such postgraduate conferences, who do not attend meetings of the county medical society, and who, in fact, are not even members of the medical association. And yet again the public cannot discern between the qualified and unqualified man, and it becomes increasingly important that every physician should be prepared.

Here in Wayne County there was employed, jointly by the Wayne County Medical Society and the Detroit Department of Health, a physician, first on a part-time, later on a full-time basis, who was known as a medical co-ordinator and who visited in his own office the physician who did not come to the medical society meetings and who did not participate in the refresher courses. To such family physician in his own office, the co-ordinator presented not only the methodology of a program jointly sponsored by the medical society and the health department, but presented factual information with regard to the service to be recommended. If diphtheria protection was the order of the day, the Schick test would be demonstrated and the value of toxoid indicated. If it were a tuberculosis case finding program, the technical necessities were again meticulously enumerated. And thus when public attention was attracted to the suggestion, there was reasonable assurance that all physicians in the area were cognizant of the responsible part which they should play.

Having satisfied one's self with respect to the preparation of the profession, the co-operative health program resolves itself into a matter of bringing to the attention of the family and the public generally the need and value of protective or preventive services. This brings into play all tools, techniques and services of a well-designed and operating health education program. Health departments are prepared and have on their staffs individuals well versed in the art of health education, individuals who through the tools of the printed word, of the spoken word and visual education, can bring to the family group the story of the fruits of preventive medicine. Scientific and medical information must be translated into simple terms of lay understanding and must result in the acceptance by the laity of the offerings afforded by a visit to the family physician. The thread that binds together the layman, the physician and the healthman in a coherent scheme of personal and community health service is health education. In this process of study the family physician must accept his responsibility as a dispenser of health information and knowledge along with the health officer, the public health nurse and the health education specialist.

Health is a necessity of life. If one is to enjoy the fullness and wholesomeness of a vigorous life span, he must be relieved of the burdensome impediments resulting from bad health habits and

unnecessary exposure to conditions and accidents imposed by man's environment. That food, shelter and clothing are essential to life seems axiomatic. The family must be taught that protective health services are equally essential, that toxoid protects against diphtheria, vaccination protects against smallpox, that the periodic health examination finds abnormalities in their incipency when corrective measures can be applied, and that health habits, good nutrition, rest, hygienic living, fortify life and add to longevity. Once the family has learned these truths and is assured that services are available in the office of the family physician and are within the financial range of possibility, there will be complete acceptance of this principle. Demonstration is amply provided in the experience here in Detroit, where for the past twenty years the family physician has provided the protective diphtheria service at a reasonable charge to the family, and without cost when the economic condition indicates the necessity of meeting this service through public support. For twenty years more than half of the children born in this city have been protected against diphtheria during their first year of life by the family physician, and some 70 per cent of the infants are protected by the time they reach the age of eighteen months. The service is normally paid for on a nominal basis by the family, but when the family is without funds, the physician is paid by the community through the budget of the health department. All of this has been done without the necessity of establishing public clinics. The work has been done by the family physician in his own office, a physician fully prepared and qualified to render the service, a physician to whom the health department has referred the mothers of infants with full confidence that the family would receive the benefits to which it is entitled.

As already mentioned, there are many health adventures to which the principles of a health co-operative plan can be applied. One or two are worthy of special emphasis. As children spend on the average about one-fifth of their life span in our schools, there is need of safeguarding the health of the individual at school age. Unfortunately there has developed a tendency to single out the school age as a time for special emphasis of the health program. This has doubtless resulted from the relative ease with which children can be reached while at school. But even a cursory examination of the conditions which lead to ill health at school



age prompts the conclusion that the best school program is a good preschool program, because departures from normal health, which so severely impose themselves upon the physical and mental well-being of individuals, get their start for the most part in the age which precedes school attendance. The child before the age of five should be prepared for his educational experience by the removal of all impediments which are amenable to good preventive medical practice. The health of the preschool child should be carefully checked and reinforced with protective services through a scheme of continuous medical supervision at the hands of a conscientious physician. Thus it is possible to more efficiently apply the pedagogic disciplines of school age. Moreover, as communicable diseases in an unprotected population are most prevalent in the preschool age and one by experience and association develops his health attitudes and responsibilities early in life, it is doubly essential that we not procrastinate and leave the children neglected until they reach the age when they can go to school and be cared for by organized public effort. The need of a re-check of protection status and reinspection of the health of the growing child at school age is apparent, but neglect and oversight should be negligible factors in those places where a good preschool job has been done by the family physician in co-operation with a plan agreed upon by organized medicine and the public health department. Here in Detroit some 60,000 children come to school each year with the benefit of a health examination made by the family physician, who by all odds is better prepared to discover abnormalities in the child than a physician before whom children pass in review at school, much as automobiles progress down the assembly line. The family physician must increasingly participate in dispensing preventive services.

Much could be said about tuberculosis, the venereal diseases, cancer and heart disease, but time permits only general reference on this occasion. There is under-way in Hillsdale County of our state a very intriguing program, sponsored jointly by the County Medical Society and the Health Department, to discover early cancer. An examination for the early signs of this disease in portions of man's anatomy where they can be readily observed is becoming a part of the routine health inspection indulged in by every practicing physician in this

county. If carried to a successful conclusion, such program should make a noteworthy contribution to a postponement of death due to cancer. In fact, every physician's office must become a health center, from which there will be dispensed an ever-increasing amount of preventive medicine, not only in terms of specific services, but in terms of health education and in the promotion of a positive and vigorous health tone. The keystone of a program of preventive medicine by the family physician is co-operation—co-operation with parents, the family, the organized medical profession and the health agencies of the community. The binding theme which determines the success of the program is health education and an ultimate realization on the part of the laity that public health is a commodity essential to good life, a commodity which must be within the economic range of every family.

### MSMS

Cancer has become one of the leading causes of death among children. Within a short period of time, it has risen from a position of comparative insignificance to one of great prominence. Today, cancer kills far more than measles, diphtheria, poliomyelitis, or a number of other "childhood" diseases.

The attitude of hopelessness and despair so often adopted in relation to childhood cancer is justified in only certain instances. True, many tumors in children, as now seen, have unfavorable prognoses; but there are several reliable reports of long periods of survival of young patients suffering from intracranial tumors, osteogenic sarcomas, retinoblastomas and various other neoplastic disorders. Particularly in the preschool child, numerous curable types of cancer are found. In this group, certainly, significant reduction in mortality rates might be expected to result from frequent and adequate physical examination, and prompt and accurate diagnosis. —*Texas Cancer Bulletin.*

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*Aneurin Bevan, British National Health Administrator*, has felt compelled to say: "Because things are free is no reason why people should abuse their opportunities. This is a very great test of the maturity of the British people, insofar as they have all the resources of the medical profession at their disposal without charge. The general practitioner has a great responsibility. Overprescribing can be as bad as underprescribing. Some general practitioners are very conscious of the impressiveness of long lists of drugs in their prescriptions on the psychology of their patients." Mr. Bevan further observed that it seemed that an extraordinary proportion of the population had bad sight.

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*Since the British national health service was instituted in July*, everybody in England has become a patient. Ailments which were never before discovered or considered to inconvenience the citizen are now demanding attention at state expense. Hypochondriacs and persons who have trifling ailments for which they would never trouble a doctor are now besieging the offices of doctors and dentists, simply because attention is at the expense of the state.—*British Medical Journal.*

# Present Status of Antithyroid Therapy

By William S. Reveno, M.D.

Detroit, Michigan



**B**ETTER UNDERSTANDING of thyroid physiology and improved management of disturbed thyroid function have developed with the introduction of the antithyroid agents, thiouracil, propylthiouracil and radioactive iodine. Until 1943, when Astwood<sup>1</sup> introduced thiouracil, iodine

held top place in the field, a position justly earned because of its ability to subdue the hyperthyroid state long enough to permit surgical intervention with safety. That it would ultimately be replaced by newer more adequate agents was inevitable, for iodine has certain shortcomings that impede progress towards better management of thyrotoxicosis.

## Iodine's Waning Importance

Iodine's greatest usefulness is in the preoperative preparation of patients with toxic diffuse goiter or Graves' disease. Here the gland has an abnormal storage and release capacity for iodine, gobbling it up avidly and discharging it promptly into the blood stream. After two to three weeks, when a high blood level is reached there is increased colloid storage with temporary arrest of overactivity. Further administration may promote greater production of thyroxine with recurrent toxicity, or it may induce a refractory or iodine-fast state.

In patients with toxic adenoma the reaction pattern is generally similar, but variable and unpredictable because of structural and other undetermined barriers.

The desired result, control of toxicity with significant reduction of the basal metabolic rate, appears in most patients following fairly large doses of iodine and is accompanied by involution of the gland. It then becomes possible to intervene surgically with safety, thus achieving control of the hyperthyroidism.

But there are many in whom the response is not

satisfactory and some who develop refractoriness, so that arrest of the toxicity cannot be accomplished. This rather formidable group has, accordingly, either been subjected to thyroidectomy inadequately prepared, with dire results, or permitted to "burn out," with widespread damage, particularly to the heart and liver.

## Thiouracil's Rise and Fall

It is small wonder then that thiouracil, the first of the new antithyroid agents, was received so cordially as it demonstrated its distinct ability to put an effective brake on all forms of hyperthyroidism.

This drug, unlike iodine, causes an increased hyperplasia of the gland and does not stimulate production of colloid. In adequate doses it stops the manufacture of thyroxine probably through inhibition of the peroxidase or enzymatic system whereby iodide is oxidized to form the thyroxine molecule.

In a comparatively short time the effectiveness of this new agent became manifest through the significant manner in which it controlled thyrotoxicosis and the remarkable decrease in the morbidity and mortality following thyroidectomy. Patients prepared by the combined use of thiouracil and iodine, the former being given until the basal metabolic rate was normal, then adding iodine for one week, discontinuing the thiouracil for another week or two while continuing the iodine until surgical intervention, simply did better than ever before. Operation proceeded as smoothly as for nontoxic goiters; there were no operating room dramatics, no postoperative crises, and convalescence progressed uneventfully with minimal time-loss and expense.

At the same time, good results were also being observed in the medical treatment of hyperthyroidism, and soon medical versus surgical treatment became a sharply debated issue with opposing camps forming in the effort to establish supremacy of one method over the other.

Blossoming hopes on either side were soon blighted, however, by the discovery that thiouracil was not as complete a blessing as had been supposed. Toxic reactions occurred in increasing numbers, and while some were insignificant, one, in which there was depression of the bone marrow with agranulocytosis and death, was sufficiently alarming to dampen much of the initial enthusiasm.

At the end of three years of use, the experience

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with thiouracil may accordingly be summarized as follows:

1. It is a potent thyroid-depressing agent, inhibiting the production of thyroxine and increasing the hyperplasia of the gland.
2. Both toxic adenomatous and diffuse goiters are influenced favorably, remission occurring after an average six weeks of administration.
3. Permanent remission occurs in approximately 10 per cent of patients. The relapse rate is highest in those treated for less than six months. There is no way of predicting how long a period of treatment is necessary for inducing permanent remission.
4. The gland tends to increase in size at first but usually recedes and becomes smaller.
5. Exophthalmos is rarely increased.
6. Auricular fibrillation of thyrotoxic origin is favorably influenced.
7. Toxic reactions occur in about 13 per cent of treated cases, agranulocytosis, with an incidence of 2.5 per cent, being the most serious. Drug fever, next in incidence, is due to an idiosyncrasy and precludes further use of the drug.

As the first of the antithyroid drugs, thiouracil proved most useful in the preoperative preparation of patients, making for simpler, less costly preparation and smoother, shorter convalescence. Its use for prolonged medical treatment resisted evaluation because of the tendency to relapse and the likelihood of toxic reaction. Nevertheless, it held a dominant place in the treatment of those with recurrent thyrotoxicosis, refractoriness or hypersensitivity to iodine, and the bad-risk patients, such as the aged and the thyrocardiacs.

In the meantime the search for a drug that possessed the advantages of thiouracil without its disturbing toxicity was being prosecuted with vigor. Thiobarbital<sup>2</sup> and methylthiouracil<sup>5,6</sup> appeared as most likely substitutes, but after clinical trial, the first was discarded because of its extreme toxicity. Methylthiouracil, first introduced in Sweden and Australia, has to date not been used in a sufficient number of patients to determine its toxicity, although it appears safer than thiouracil in this respect.

#### Propylthiouracil, Front and Center

The answer that was sought appeared early in 1946 when Astwood<sup>3</sup> reported his experience with propylthiouracil, a drug more potent and less toxic

than thiouracil. This new agent was at first used cautiously because of fear of toxic reaction, and the early results, with too small dosage, were not very impressive. Soon, however, as larger amounts were used and experience increased, the true value of the drug in inducing remission with a minimum of toxicity was rapidly established. Today propylthiouracil appears to be the antithyroid agent of choice, as attested to by the growing number of successfully treated patients. Evidence of its efficacy and safety is accumulating steadily, and a comparison of its action with that of thiouracil reveals the following:

1. Remission appears in eight to ten weeks (a little longer than with thiouracil) with a dose of 150 to 250 mg. per day.
2. Exophthalmos and thyroid enlargement recede in similar fashion.
3. There is but slow weight increase, and myxedema rarely develops.
4. There is only occasional depression of the leukocyte count, and only one instance of agranulocytosis has been reported in over 1,500 treated patients.

In my experience with ninety-five patients treated during a period of twenty-two months there was only one instance of drug fever, an incidence of toxicity of only 1.1 per cent. Five patients who were unable to take thiouracil were treated successfully with propylthiouracil. Included in the series were three patients with hyperthyroidism complicating pregnancy, who remained in remission and were delivered of normal infants.

Twenty-eight per cent of this group have remained in remission for periods longer than six months.

The procedure followed in treatment consists of giving an initial dose of 150 to 200 mg. of the drug daily until the basal metabolic rate reaches zero. Reduction by 50 mg. at a time is made until a maintenance dose (generally averaging 100 mg. daily) is reached, and this is continued for at least six months of remission before stopping it. Patients are at first seen three times at intervals of two weeks and then report at monthly intervals for a basal metabolism test and blood count.

#### Radioactive Iodine, Rising Star

This remarkable agent was first introduced by Hertz, Roberts, and Evans<sup>4</sup> in 1938 for the study of thyroid function and was soon applied to the

treatment of Graves' disease. Investigations were interrupted by the war but were resumed in 1945. Since then, an increasing number of reports on its use for tracer purposes, as an aid in measuring the potency of antithyroid drugs, and in therapy for hyperthyroidism, has appeared. In the later use, there is as yet insufficient data to determine its place, although in adequate doses it appears capable of inducing lasting remission in three-quarters of the patients treated. If it were not for the fibrotic change in the gland, possible permanent myxedema and the risk of late effects of internal radiation, radioactive iodine could become the simplest and cheapest method for treating hyperthyroidism.

### Summary

Summarizing the data presented, it is evident that, from the point of view of efficacy and safety, pride of place belongs to propylthiouracil. Iodine now ranks second because of its tendency to induce refractoriness and its failure to produce satisfactory remission in a sizable proportion of patients. Although it may alone induce remission successfully in mild hyperthyroidism, its most useful role is as an adjunct to propylthiouracil.

Thiouracil has outlived its usefulness. Having demonstrated the value of complete suppression of thyroid action and blazed the trail for newer agents, its further use is uncalled for because of its dangerous toxicity. Now that safer drugs are available it should be withdrawn from the market.

Methylthiouracil may achieve acceptance after more data has been acquired regarding its action. There is no question as to its potency, but the toxic potentialities have not as yet been fully explored.

Radioactive iodine is serving usefully for the study of thyroid physiology, the evaluation of the potency of antithyroid drugs, the location of displaced thyroid tissue and metastases, and the diagnosis of borderline states of hyperactivity. Its place in therapy is still to be determined, although its positive ability to suppress thyroid activity has been amply demonstrated.

What of the value of antithyroid therapy for prolonged medical treatment? It is difficult, after but four years experience with these agents, to offer more than a qualified answer until there is further light on the permanency of remissions. The experience to date warrants a trial of medical treatment for patients with exophthalmic goiter because of its safety and reversibility and its avoidance of post-operative complications. Relapse on stopping treat-

ment is certainly no more serious than recurrence following operation, and a second or third course of therapy is much simpler than another operation. Should either patient or doctor tire of prolonged treatment, thyroidectomy can always be performed.

Medical treatment is also indicated for those with recurrence following operation, for children with hyperthyroidism and for bad-risk patients, such as the aged and those with thyrocardiac disease.

For patients with toxic nodular goiter, surgery, preceded by antithyroid therapy with or without iodine, is still the choice procedure because it is practically risk-free and is followed by prompt cure with elimination of the risk of malignancy.

### Conclusion

With the introduction of the antithyroid drugs, the physician is provided with new and effective tools for combatting toxic goiter until the time when the cause for this disturbance will have been discovered and suitable preventive and curative measures developed. In the meantime, the patient's position has improved immeasurably whether he is subjected to surgery or treated medically.

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### ALLOWANCES TO MEDICAL WITNESSES IN CRIMINAL COURTS

As from September 13, 1948, there has been a substantial improvement in the allowances payable to medical practitioners attending to give professional evidence in the criminal courts. Under the Witnesses' Allowance Regulations, 1948, which came into effect on that date, the maximum allowance to a witness to fact is £5 per day irrespective of whether the practitioner attends to give evidence in one or more cases, or of whether the court is in the town where the practitioner resides or elsewhere. Where, however, the time during which the witness is detained away from his practice does not exceed four hours the maximum allowance is £2, 10s., except in cases where he attends to give evidence in two or more separate cases. In the latter event he may be paid allowances exceeding in the aggregate £2 10s but not exceeding £5.—*British Medical Journal*, Sept. 25, 1948.



# Quantitative Serologic Tests

## *Use in Diagnosis of Syphilis and Follow-up After Treatment*

By L. W. Shaffer, M.D.

Detroit, Michigan

**S**TANDARD SEROLOGIC TESTS for syphilis, like qualitative tests in chemistry, aim to determine if the reagin of syphilis is present in the blood specimen to be tested. They are only roughly quantitative. A fixed amount (usually 0.15 c.c.) of the inactivated undiluted serum is added to the diluted antigen in varying amounts of the 3-tube Kahn test. These are read as positive in from doubtful to 4-plus reactions. No attempt is made to determine how much stronger than 4-plus the reaction may be.

The quantitative procedure, like a quantitative chemical examination, attempts to determine the amount of reagin present according to the maximum dilution in which a positive reaction still appears. In other words, if a positive reaction is reported from the standard serologic procedure such as a Kahn precipitation test, an attempt is made to find out how much the serum can be diluted before this positive reaction disappears. This can be interpreted in units and has quantitative significance. As an example, quantitative tests may be made to determine the presence or absence of sugar in urine with Fehling's or Benedict's solution. The laboratory reports sugar, its absence, or presence in amounts from a trace to strongly positive. If it is desired to know, however, how much sugar is present, a quantitative sugar test is made and the percentage of sugar present determined. A quantitative serologic test for syphilis aims at similar information. If the standard test is positive, progressive serial dilutions of the serum in question with normal saline may be set up from 1:1 to such dilution required to cause the positive reactions to disappear.

It is very rare that serums will be positive in dilutions of over 1 to 1,000. In secondary syphilis, positive dilutions of 1 to 32, to 1 to 512 are the rule. Thus a quantitative may be reported as positive in a dilution of 1:1, but this is the weakest positive reaction. Since the standard test is carried out with undiluted serum, there is no need or

indication to do quantitative tests on bloods yielding less than a 4-plus reaction. If the specimen sent in is reported as negative or less than a strong positive, no quantitative test is indicated.

Quantitative tests may be reported according to dilution or in units. A test reported as positive in a dilution can be changed into units by multiplying by 4. As an example, a positive in dilution of 1 to 1 equals 4 units; positive in 1 to 32 equals 128 units. A quantitative evaluation can be made for any of the modifications of the precipitation and complement fixation tests; however, the quantitative Kahn test is the one most used in Michigan.

A quantitative test is essential in the follow-up of patients with early syphilis who receive intensive treatment. Such cases do not become negative immediately after treatment, and the rate of reversal is dependent upon the degree of positivity at the time treatment is given and upon the type of syphilis present. In fact, intensive penicillin treatment commonly acts as a provocative, and the case is more strongly positive immediately after treatment than at the start. However, soon after treatment the titre should fall progressively to negative within a period of two to eight or more months. Frequently the titre may drop progressively for a time and then suddenly show a marked increase. This must be interpreted as a serologic relapse. It is a warning of impending clinical relapse and if there is a decided rise (4 or more dilutions), it calls for retreatment. If this occurs while the patient is still strongly positive to the standard Kahn and such standard tests only are being used, there would be no means of recognition of such serologic relapse short of associated clinical lesions. A patient may be positive in a dilution of 1 to 256 at the time of treatment; 1 to 128 one month later; 1 to 32 at two months; 1 to 8 at three months; 1 to 2 at four months and again 1 to 128 at five months. The standard Kahn tests would be reported as 4-plus throughout this entire period, and the serologic relapse would pass unheeded. After the titre becomes less than positive in a dilution of 1 to 1, only the standard test is indicated. If it becomes again positive at a future date, a quantitative test should be requested to interpret the degree of relapse.

Quantitative tests would be valuable for rapid decision as to the presence or absence of congenital syphilis in newborn babies of syphilitic mothers. If the mother's serologic test for syphilis is positive, the serologic test on the cord blood of the baby

Read at the Second Annual Michigan Postgraduate Clinical Institute, Detroit, March 10, 1948.

at birth is frequently also positive. This may represent a passive transfer of reagins from the mother in the absence of infection of the baby. The baby will become spontaneously negative, if not infected, in three to twelve weeks. In the meantime, the baby should not be diagnosed as having congenital syphilis unless other confirmatory evidence is present or appears, such as changes in placenta, x-ray findings in the bones, or the development of active clinical signs in the baby. Quantitative serologic tests will give valuable information. If the test on the cord blood is positive in a dilution of 1 to 128, for example, and a blood test at the end of one to two weeks on the baby shows a definite drop, as 1 to 8, it is indicative that the test may be expected to progress to complete negativity. However, if the test remains positive in a dilution of 1 to 128 or goes higher, it indicates that the baby has congenital syphilis. Quantitative procedure on cord bloods are not very satisfactory. A specimen from the baby could be taken if the cord blood is reported positive in a few days and repeated in one to two weeks to establish the trend of the serologic titre.

Quantitative tests are of value in differentiating between specific and nonspecific (false positive) serologic tests for syphilis. Most nonspecific reactions are temporary in nature, and if the titre of a test is dropping in the absence of treatment, it gives supportive evidence of a false positive reaction. If the titre remains at a constant level it suggests a specific reaction, and a rising titre in the absence of any active cause for false positivity suggests a recent infection, possibly occult syphilis.

The value of the quantitative test in the appraisal of serologic progress under treatment, outside of the intensive treatment of early syphilis, is questionable. The pitfalls of using the blood test as a criterion of cure in early syphilis or as an indication for continued treatment in late syphilis are well appreciated. Because of these problems the dictum has been emphasized that one should insist on that amount of treatment which experience has taught to be effective in spite of serology. Unfortunately, experience as yet does not permit didactic statements as to what amount of penicillin therapy is adequate. At the same time, serologic response in late and late latent syphilis has been disappointing and even more so with quantitative tests. There has not been sufficient accumulated experience with quantitative tests in late syphilis under treatment to justify any rational interpretation. It is

advised that quantitative tests need not be requested for such late cases.

Quantitative tests on spinal fluids have been used in a modified form for many years. Most laboratories employing Wassermann or complement fixation tests on spinal fluids have reported results on varying amounts of spinal fluids from 1/10 to 1 c.c. This degree of quantitation has been satisfactory. It has also given a sense of satisfaction in following cases under treatment to see them becoming progressively less positive as the test becomes negative in the smaller amounts of spinal fluid. The first and most important evidence of improvement is noted in cell count, total protein and colloidal gold. Colloidal gold tests are very capricious. They should not of themselves be considered diagnostic of neurosyphilis, the type of neurosyphilis, or its prognosis. If these signs of activity become negative along with clinical improvement, the positive serology on spinal fluids, like serologic fastness on the blood serum in the presence of adequate treatment, may be disregarded in most cases. Quantitative Kahn tests on spinal fluids, although available, have not been offered by the laboratories of the Michigan State Health Department.

Quantitative serologic tests are a time-consuming laboratory procedure. Local and state health department laboratories are already carrying a larger load of routine Kahn tests than their facilities justify. They are not in a position to offer quantitative tests except on a very restricted basis. It is therefore urged that quantitative tests should not be requested unless they are considered quite urgent. Such specimens should be sent to private laboratories when the financial status of the patient permits.



#### THE COST OF HOSPITAL TREATMENT

At a recent meeting of the Board of Estimates of this city, the following comparative statement of the average daily cost per capita for ward patients in the larger hospitals in this and other cities was presented:—Presbyterian Hospital \$2.35; St. Luke's Hospital \$1.82; Mount Sinai Hospital \$1.50 to \$1.55; St. Vincent's Hospital \$1.05; St. John's Hospital (Long Island City) \$1.10; Roosevelt Hospital, \$2.01; Massachusetts General Hospital, \$2.15; Rochester City Hospital, \$1.61; Lakeside Hospital, Cleveland, \$2.14; Boston City, \$1.92.—*Medical Record*, October 25, 1902. (Taken from the Scrapbook, Harper Hospital.)



# Pneumonia and Its Complications

By L. G. Christian, M.D.

Lansing, Michigan



**P**NEUMONIA OF twenty years ago was an entirely different disease from the one we most frequently encounter today. At that time, lobar pneumonia, with its dramatic onset of rigor, severe chills and fever, left the patient prostrate and critically ill from the beginning, with a flushed face, ex-

piratory grunt, pleural pain, blood tinged sputum, dyspnea, tachycardia, cyanosis and anoxemia. Complications during this stage of the disease were:

(1) Peripheral vascular failure. The clinician (the general practitioner of that day) recognized this complication when a rapidly increasing pulse occurred with a falling blood pressure, and if the pulse rate was higher than the blood pressure, he said, "The patient looks sick" or "He looks toxic." This condition may be followed by dulling of mental faculties, restlessness, delirium or mania, with increased distention of the abdomen, a grave omen.

(2) Cardiac irregularities, such as premature beats that are no cause for alarm. Auricular fibrillation or flutter occurs in 2 to 5 per cent of the cases; they are more common in patients over sixty-five years of age and should be recognized and dealt with the appropriate measures.

(3) Digestive symptoms, anorexia, nausea and vomiting, are common symptoms; and acute dilatation of the stomach, accompanied by hiccough and distention of the upper abdomen, is a grave sign if not relieved by gastric lavage or continuous suction. Jaundice is an uncommon symptom.

(4) Respiratory complications. Pleuritis is the most common complication; pleurisy with effusion and empyema occurs in 10 per cent of the

cases and usually prolongs the morbidity and increases the mortality of the disease. As is well known, it was treated by aspiration and finally rib resection.

(5) Pneumothorax also occurs with dramatic onset and requires early recognition and immediate relief by aspiration.

(6) Urinary symptoms. Albumen, casts, leucocytes and red blood cells occur in practically all of the cases of lobar pneumonia. Seldom, however, is acute glomerular nephritis encountered.

This, then, was the pneumococcic lobar pneumonia familiar to every physician who practiced in that era.

## Prognosis

The mortality in the pre-sulphonamide days varied from 15 to 45 per cent, depending upon the type of pneumococcus responsible. Then we began to find ways and means to overcome this dread disease: first, by equine sera of various types, and later by rabbit sera. These, when used early and against the proper type of the pneumococcus, afforded dramatic cures in a high percentage of cases. Various state and city health departments set up programs for pneumonia control. One of the most notable was carried out by the Michigan State Health Department, the Detroit Board of Health, and the Commonwealth Fund. They offered services for typing sputum and furnished sera gratuitously to the physician and the patient, but before the anti-pneumococcic sera had reached the stage of actual control, the sulphonamide compounds were introduced: sulphanilamide, sulphapyridine, sulphathiazole and finally sulphadiazine. These compounds were eagerly put to use by practitioners, led by Findland, Flippin, Wood and a host of other workers; and finally, with the almost universal use of penicillin, lobar pneumonia, with its previous mortality reaching up to 45 per cent, lost its title as "Captain of the Men of Death."

Thus today, most of the pneumonias that are encountered by practitioners of medicine are totally different diseases and are known by many names: broncho-pneumonia, virus pneumonia, influenzal pneumonia, migratory pneumonia, and pneumonitis.

In the latter half of the last decade, descriptions of a peculiar respiratory disorder began to appear in the literature. The disorder bore a resemblance to broncho-pneumonia, lobar pneumonia, influen-

From the Medical Service of St. Lawrence Hospital, Lansing, Michigan.

Presented at the Second Annual Postgraduate Michigan Clinical Institute, Detroit, March 12, 1948.

zal pneumonia, and other common respiratory diseases. A commission on acute respiratory diseases studied the whole broad features of these diseases and reported them in various medical journals. These studies included the clinical signs and symptoms, x-ray, bacteriologic and blood studies. The symptoms, according to these workers, are cough, fever, chilliness, headache and malaise. In about half of the cases, coryza, sore throat, pleural pain and bloody sputum are present, in that order. Cough, the symptom which is the most troublesome, is usually the first sign. It is frequent and constant, unproductive at first, later becomes mucoid, and is seldom purulent. The clinical course runs from one to two weeks; the patient may be moderately prostrated; respirations may be increased, the pulse seldom elevated; the leukocytes rarely range above 10,000, usually 5,000 to 8,000. The physical signs include nasal congestion and reddened throat; râles are fairly constant but may not appear before a week or ten days. This emphasizes difficulty of early diagnosis, and we have come to depend more and more upon routine x-ray of the chest for diagnosis in all upper respiratory infections. There is so much confusion among general practitioners, internists, and roentgenologists as to the classification of these non-lobar pneumonias, that in different localities they may be known as broncho-pneumonia, pneumonitis, atypical pneumonia, and the one that is gaining most publicity, the so-called virus or viral pneumonia. To illustrate this confusion, a review of the cases of pneumonia of all types occurring in a 250-bed general hospital, where general practitioners are members of the staff with privileges of treating their own patients, shows that during a twelve-month period from August, 1946, to August, 1947, there were admitted 318 cases diagnosed as pneumonia. And of these 318 cases there were 185 adults and 133 children. As to sex, they were equally divided, 159 female and 159 male. The over-all mortality was 18 per cent; the lobar pneumonia mortality was 25 per cent, the non-lobar pneumonia mortality was 13 per cent. The average hospital days were twelve. Of the total of 318 cases of pneumonia, only twelve were definitely lobar, proved by either x-ray, autopsy or the usual laboratory data. Of the fifty-five deaths among patients classified as having non-lobar pneumonia, there were eighteen cases complicated by such diseases as congestive heart failure, fractures of the femur, prostatectomies, bronchiectasis, emphysema, diabetic coma,

carcinoma of the lung, carcinoma of the colon and hypostatic pneumonia. So if we eliminate the cases where pneumonia was secondary, it leaves us with a mortality for the primary non-lobar pneumonia of 13 per cent. Of this 13 per cent, there were 182 cases within the age group under ten and over sixty, with a mortality of 15 per cent. There were 124 cases with nine deaths in the age group over ten and under sixty, with a mortality of 7 per cent.

Of the complications, there were only three cases of pleurisy with effusion and empyema; these were treated by thoracentesis and cured without rib resection, and there were no deaths. There were three cases of atelectasis, proved by x-ray, all treated by bronchoscopy and without mortality. Bronchial asthma occurred in three cases; the diagnosis was apparently made on the basis of typical asthmatic breathing (wheezing) and the so-called asthmatic râles, and all were relieved by adrenalin. They were all receiving penicillin, which makes one think that the asthma is not a true complication of pneumonia but rather an allergic reaction to the medication. There was no mortality in this group.

There was one occurrence of lung abscess. Following bronchoscopy with drainage, the patient was discharged in eleven days with a notation on the chart "improved." There was one case of meningitis, which ended in death. Diagnosis was proved by autopsy.

There were four cases with x-ray evidence of an old tuberculosis with the non-lobar type of pneumonia.

Among children, otitis media appeared fairly frequently, with eight cases and one death.

One case of laryngeal edema appeared in a child, who later recovered.

In a group classified or diagnosed as having pneumonia, either hypostatic or terminal, following operations on the prostate, for carcinoma of the colon, for metastatic carcinoma of the lung or fracture of the hip, arteriosclerosis, congestive heart failure, bronchiectasis and emphysema occurred frequently in the elderly patients above seventy years of age.

From this, we can say that pneumonia of today, compared to that of twenty years ago, is not only a different disease but a much milder one.

One of the newer and more rare complications of pneumonia has recently been described by Evarts Graham of Washington University, St. Louis, which he designates as the middle lobe syndrome and in



which there is atelectasis with bronchial obstruction. This obstruction comes from without, or extrinsically, and is characterized by an upper respiratory infection, pneumonia, that runs for several weeks or intermittently for many months, with fever, persistent cough, loss of weight, prostration and blood-streaked sputum. X-ray studies show atelectasis behind the obstruction, at times with abscess formation. Bronchoscopy reveals narrowing of the bronchus extrinsically.

Graham has found that these patients can be cured only by lobectomy. He believes that penicillin appears to be a factor in this complication, in that it either was not given early enough in the course of pneumonia or was given in insufficient amounts. In other words, he believes that enough was given to allow the patient to live but not to cure the infection in the hilar glands of the lung, and the swelling or enlargement of these glands produced pressure on the bronchus, causing the obstruction. His communication will appear in an early number of *Postgraduate Medicine*.

It will be interesting to see if other bronchoscopists and chest surgeons will confirm this unusual and excellent observation.

What are the causes of the decline or decrease of the number of cases of lobar pneumonia? The demand for medical service. More people are calling and seeing physicians earlier than ever before, probably due to four factors: (1) increased income, (2) lay education in medical subjects by newspapers, popular magazines and the radio, particularly the radio programs sponsored by state and county medical societies which always have authentic information, (3) growing confidence in the medical profession, and (4) the training, ability and the alertness of the general practitioner.

The sulphonamides and penicillin have become the most popular of all drugs. The busy physician who is called to the bedside of a patient with an acute upper respiratory infection, whether it be the common cold, tonsillitis, bronchitis, or one of the pneumonias, is immediately importuned by his family or friends to use "sulpha" or "penicillin." By this widened and almost universal use of these drugs, I think, no one can question that those bacteria that are sensitive to these agents, the pneumococcus, streptococcus, et cetera, have been decreased in virulence or destroyed in the respiratory passages, and fail to act as a complicating factor in the pneumonias. Nor should we decry this prac-

tice, as I am confident that many mild upper respiratory infections that would have led to pneumonia have been aborted, and that the morbidity and the mortality have been definitely lessened.

No one can deny that these excellent drugs have been wasted on diseases of minor character, where neither the sulphonamides nor penicillin were indicated, and where they have no effect. I believe, however, that on the whole the universal use of these materials has been a major factor in the reduction of the mortality of a disease that for a century has been one of the greatest causes of death, namely, lobar pneumonia.

The complications also have been equally controlled, and the decrease in the mortality of this disease has been due to the medical man who first sees these patients in their homes, namely, the general practitioner.

### Summary

1. A series of 318 cases of pneumonia, treated primarily by general practitioners, with an overall mortality of 18 per cent.
2. The lobar pneumonia mortality was 25 per cent.
3. The non-lobar pneumonia mortality was 13 per cent.
4. Primary non-lobar cases under ten and over sixty years of age were 13 per cent. Primary non-lobar cases over ten and under sixty years of age were 7 per cent.
5. Confusion as to the type of pneumonia and its complications, among general practitioners, internists and roentgenologists, has been emphasized.
6. The almost universal use of the sulphonamides and the antibiotic, penicillin, has apparently reduced the mortality, morbidity and the complications of these diseases.

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## A Doctor's Study Is Never Finished

Continued postgraduate education of our doctors is by far the most important function of any state medical society. This activity is of paramount interest to the health of the people. Well informed doctors mean excellent and satisfactory medical care for the public. Few doctors on their own initiative can or will keep up with the swiftly moving science of medicine. The medical society must step in and stimulate an interest in continued postgraduate studies. It must do this by offering interesting and intriguing lectures and demonstrations on medical subjects which will make a busy practitioner want to leave his practice for a day or two to obtain advanced knowledge which he can use in the care of his patients.

Michigan Medicine has pioneered state-wide continued postgraduate education of its doctors. It has national recognition for the excellence of its programs. There is no question but that our efforts over the years are directly responsible for the high standard of medical care which the people of our state now receive. An outstanding event of our program is the Annual Michigan Postgraduate Clinical Institute to be held in Detroit on March 23-24-25, a concentrated capsule of medical knowledge prescribed for the general practitioner. None of us can afford to miss this meeting. Make your plans to attend now.

I wish to express my personal appreciation to all our teachers and lecturers who have participated in our postgraduate programs in the past. It takes effort to prepare a talk. It means sacrifice of time away from professional duties. Only zeal to impart advanced medical information to his fellow practitioners causes a doctor to expend the effort necessary for his presentation. There is only one payment that is acceptable to these doctors, and that is a large and attentive audience. Let us pay tribute to our medical teachers by attending all possible postgraduate sessions. No matter what the subject, no matter what your special interest in medicine is, you can always learn something of value that you can use in your practice to the benefit of your patients.

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



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# Editorial

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## A NEW YEAR

WITH this issue of THE JOURNAL, we are commencing a new year in the work of the Michigan State Medical Society, a new year of medical journal activities, and a new year in the development of medical practice and service to our people. New social conditions and political powers point to a year of great problems which must be solved, of increased activities which everyone must assume if we are to preserve the private practice of medicine. We have now reached a point where the officers and active workers must have help if the program of socializing the medical profession is to be stopped. In the nation the 187,000 doctors must not depend on the less than 2,000 workers.

Oscar Ewing, Federal Security Administrator, says that he will carry through his program and does not fear the opposition of the medical profession. The President promised compulsory health service and claims that his overwhelming re-election is a mandate from the people to bring this about.

The officers of the Michigan State Medical Society have seen this social evolution for many years and have proposed alternative programs. After ten years of study, research and effort, we proposed and established Michigan Medical Service as a method of providing health care for those of our people who most needed it, using the insurance principle. Many new problems had to be solved. We were working in an entirely new field. Other states worked along similar lines. Our medical plan in Michigan has now reached approximately 1.3 million people and has demonstrated that we can protect our people—through voluntary means—from the financial calamity accompanying serious illness.

The services which we offer could be increased and will be increased when the people wish them, still preserving private enterprise for our doctors and a self-satisfied feeling of independence for our people. The forces working for social changes are becoming more determined than ever before. Every member of the medical profession or of allied professions should feel called upon to render active service in the nature of work. We must

contribute our time as well as the necessary increase in dues and contributions for educational purposes which we have been making.

This year will make great demands upon us, but if we meet those demands with a united effort, with every man putting his shoulder to the wheel, when another year comes around, we may be able to look back with satisfaction and look forward with confidence.

## IT'S BAD—BUT GIVE US MORE OF IT!

ABOUT EVERY so often something happens to bring before the public the question of socialized medicine. Two or three years ago the condition in the Veterans Administration Hospitals was advertised throughout the country as being extremely bad. The case load of the administration was piling up. They were having difficulty in getting doctors to staff their hospitals and some of the column writers in the larger newspapers were giving extremely bad publicity to the administration. The Government placed General Paul R. Hawley in charge and he cleaned up the mess.

Now it seems to be the mental hospitals that are in for a bad session. Columnist Albert Deutsch has written a book, which we are reviewing on another page, "The Shame of the States." Mr. Deutsch, in this book, is a reporter. He took photographers along with him and he evidently found the most shameful things and conditions that exist in mental hospitals. If the stories he tells and the pictures he shows are half true, these hospitals are certainly a disgrace. Mr. Deutsch, according to his publishers, is qualified to make this survey and this criticism because he has received the Lasker Award "citation for outstanding contribution to the advancement of mental health." We have taken the trouble to inquire about the Lasker Award. The Laskers are working with the other persons in our Federal Security Administration who are bending every effort to discredit the medical profession as it now practices and to extend compulsory health insurance or socialized medicine. One hand washes the other.

The group makes Mr. Deutsch an expert by giving him one of their medals. He holds the mental hospital up to scorn as his predecessors did

two or three years ago in the matter of Veterans Administration hospitals. These two groups are the outstanding pieces of socialized medicine which Government has administered. Mr. Deutsch abhors the effects, but in his columns he urges this same process upon the whole nation, for ALL medical care, not just in mental hospitals!

Please, Mr. Deutsch, be more consistent.

## IN THE SADDLE

THE AMERICAN Medical Association, at its 1948 interim session in St. Louis, took two important steps which many of our state societies have been urging for years. We have believed that the responsibility for publicity in regard to practice of medicine, medical economic problems, and national legislation should be the responsibility of the American Medical Association, and not the various independent organizations. Since it was not feasible for the American Medical Association to undertake this task, some of our state societies have established bureaus in Washington, others have established contact expeditions to Washington to get acquainted with the Congressmen and to keep them posted upon the numerous problems in relation to practice of medicine and legislation. For many years, resolutions have been brought to the House of Delegates urging that this educational campaign was actually the job of the American Medical Association and should be conducted by them. Something over two years ago the Association hired a national Public Relations Counsel and thought the profession was finally headed in the right direction.

For many years, publicity of a medical nature has been adverse to medicine. Much of it was stimulated by selfish interest; much of it by those who wish to socialize the practice of medicine, and a considerable portion of it grew out of the suit that the Government brought against the American Medical Association in which the Association was charged with conspiracy in restraint of trade and was actually convicted under the Sherman Anti-Trust Law. Publicity has been bad and the stories in the press and over radio were becoming increasingly adverse. The Public Relations Counsel which was employed two years ago did not work out and various private committees and associations continued to carry on the work.

At St. Louis, the House of Delegates instructed the Board of Trustees of the American Medical Association to enlarge the Washington office and

their facilities for public education, and assessed dues upon the membership to cover the increased expense. This is the first time in history that the members of the American Medical Association have been requested to pay dues. The fellows pay a subscription to *The Journal*. The publicity of this action of the American Medical Association has already been adverse—called a “slush fund” for lobbying. The fund actually was appropriated for educational purposes and for increased expense of carrying on society medical economic studies at the national level.

The House of Delegates took a second action: the Blue Shield has struggled with an outstanding degree of success to supply benefits to the public by which they can budget their catastrophic medical, surgical and hospital expense, and do it in an independent American manner. This has been worked out from the state level. It has been increasingly evident that much of this service is lost to the voluntary prepayment program because of sales difficulty. Dr. Paul R. Hawley and the Blue Shield Commission had recommended certain procedures to cover this problem. The House of Delegates of the American Medical Association discarded the Hawley plan and assumed the responsibility for carrying out this necessary enlargement of the Blue Shield services; of assuring the American public a further distribution of voluntary medical care insurance, and of demonstrating that the compulsory plan advocated by governmental agencies is not necessary.

The American Medical Association is now “in the saddle,” in complete control of our struggle against socialized medicine. It is now charged with doing the job the state and county groups have been attempting to do for years. It is just and fitting that this responsibility rest upon the top representative medical group of the nation rather than upon the various state and county medical societies and voluntary committees.

The amazing part of the story is that the AMA already has asked the State Medical Societies to collect the \$25 dues! Next it will delegate the PR job to the States!!!

## AMA DUES

PROGRESS in American medicine is an achievement which we, as doctors, are proud to relate to the general public.

Yet, for some time now, many stories reaching lay readers have dealt with isolated cases of dis-



tress, indicting the medical profession, along with articles based on glib promises of social planners.

During the ensuing year, the medical profession must concentrate its efforts on one problem: to tell the American people about the many contributions which the medical profession has made to alleviate disease, preserve life and postpone death. Our story must stress the importance of our present system of voluntary care and present the true facts about medical care and health protection.

The House of Delegates of the American Medical Association, at the Interim Session in St. Louis, fully recognized these problems by creating a means for carrying on a nationwide health education program. To finance this program an assessment of \$25 was made on each member of the American Medical Association. Members of the American Medical Association do not pay dues. If they desire to become Fellows of the Scientific Assembly they make application and pay \$12 a years dues, which includes a subscription to *The Journal*. This hardly pays for the paper and printing; notwithstanding the fact that the doctor receives the best medical periodical published anywhere in the world.

In 1947, the expenses of the Association exceeded income. For that reason dues of Fellows were raised from \$8 to \$12. However, even higher costs have kept apace with this raise and the Association may show a net loss for 1948.

The medical profession as a whole is of the firm opinion that Government control of medicine would lower the standards of medical care in the United States, and is so sincere in this belief that it feels everything possible should be done to prevent such control from being thrust upon us.

A co-ordinating committee has been formed to help solve many of the problems which we face, and it is enlisting the support of every physician. This committee is composed of Dr. E. L. Henderson, chairman, Dr. Edward S. Hamilton, Dr. Gunnar Gundersen, Dr. Walter B. Martin, Dr. Louis H. Bauer, Dr. John W. Cline, Dr. William Bates, Dr. R. B. Robins, Dr. R. L. Sensenich, and Dr. George F. Lull.

GEORGE F. LULL, M.D.

*Secretary and General Manager*

## COUNCILOR—ELEVENTH DISTRICT



C. A. PAUKSTIS, M.D. interned in Mercy Hospital, Janesville, Wisconsin; entered practice in Fountain, Michigan, and moved to Ludington in 1935, where he has practiced since that time.

Dr. Paukstis is married and has two boys. He has served as secretary of the Mason County Medical Society, and several terms as member of the House of Delegates of the Michigan State Medical Society. He is a past president of the Ludington Rotary Club, president of the Chamber of Commerce; served on the Medical Advisory Board during World War II.

## COUNCILOR—EIGHTH DISTRICT



L. C. HARVIE, M.D.

Dr. Harvie was born in Hopkins, Michigan, January 22, 1890, attended Michigan State Normal College at Ypsilanti, 1914, and graduated from the Wayne University College of Medicine in 1918. He was house physician at St. Mary's Hospital in Detroit, also at the A. W. Blain Clinic. He has had postgraduate work at the Leland Stanford University, California; New York Eye and Ear; Wayne University; University of Michigan; and the George Washington University. He served as a private in Battery B of the 329th Field Artillery, and as First Lieutenant, M.O.R.C. World War I.

He is vice president of the Saginaw Valley Torch Club; president, Wayne University Alumni Association of Saginaw Valley; Boy Scout executive; member, Saginaw Board of Commerce;

AT THE annual session of the House of Delegates in September, Charles A. Paukstis, M.D., of Ludington was elected Councilor of the Eleventh District. Dr. Paukstis was born June 3, 1907, in Kenosha, Wisconsin; graduated from the University of Michigan in 1931;

THE HOUSE of Delegates, at the September meeting of the Michigan State Medical Society, elected Lloyd Cecil Harvie, M.D., of Saginaw as a member of the Council for the Eighth District, replacing Dr. W. E. Barstow who was made President-Elect.

Shrine; Y.M.C.A.; past director, Saginaw chapter American Red Cross; F.A.C.S.; American Association Railway Surgeons; American Association of Industrial Physicians and Surgeons; Senior Member of Staff, Saginaw General Hospital, in surgery; Associate Member of Staff: St. Luke's and St. Mary's Hospitals, Saginaw, and the A. W. Blain Hospital, Detroit.

He has served as president of the Saginaw County Medical Society; delegate to the Michigan State Medical Society for about fifteen years; was formerly a member of the State Tuberculosis Sanatorium Commission; formerly Assistant Clinical Professor of Medicine at Wayne University College of Medicine. He taught school previous to studying medicine, played college baseball and football, and professional baseball.

We welcome Doctors Harvie and Paukstis to the Council of the Michigan State Medical Society.

## SOCIALIZED MEDICINE

THE TERM "Socialized Medicine" has been applied over the years to the government type of medicine which involves compulsory service or compulsory regulation or control. It has been used in all nations to describe the form of medicine which is now being proposed in America under the guise of compulsory health insurance. A very considerable opposition to the term has prevailed, and we admit having avoided it to a certain extent and labeled the proposed program "political medicine." Both terms are repugnant to the President, Federal Security Administrator Oscar Ewing, Senator Murray, Senator Wagner, Congressman Dingell, Arthur J. Altmeyer, Isador M. Falk, and the whole gang. We think that during the present propaganda, the term "socialized medicine" should be used by our doctors every time they refer to the federalized program.

Mr. Ewing, in his report to the President on the "Nation's Health in a Ten-Year Program," very specifically condemns the term "socialized medicine" and is trying to establish the term "government health insurance." The President uses the term "compulsory health insurance." Both these terms are carefully designed to confuse the public on what they will be getting. Could they be attempting by the term insurance to capitalize upon the rapid progress made by our voluntary, non-profit, health plans? (These and the independent health and accident insurance companies combined

cover approximately 80 million people in the United States,)

So much effort has been made to overcome the term "socialized medicine" and to establish an artificial designation that we are led to believe this is one of the bureaucrats' vulnerable points. It indicates the objective which their program will accomplish—*A Socialized State*.

## SENATE BILL 5

THE NATIONAL Health Insurance and Public Health Act of 1949, S. 5 (Murray, Wagner, Pepper, Chavez, Taylor, and McGrath) was introduced on January 5. It is almost exactly the same as the Wagner-Murray-Dingell Bill of the last Congress, old S.1320. A complete reading fails to find the word "compulsory." It mentions "prepaid personal health service benefits," emphasizes local or state administration. In order to be eligible for benefits, a person must have been paying premiums from eighteen months to three and one-half years. The needy will be cared for, providing their "expenses are reimbursed by public agencies of the United States, the several states, or their political subdivisions."

The Bill provides that: (1) Any organized group, (2) any partnership, association or consumer co-operative, (3) any hospital and any hospital and its staff, (4) any organization operating a voluntary health service insurance plan or other voluntary health service plan—may render service under this bill. There is no assessment levied, but provision is made for an appropriation by the government of an amount equal to 3 per cent of all wages estimated to be received during the year, estimated upon the first \$3,600 income, and the net income from farms, business, professional or other self-employment. Certain classes of people are exempt, such as "duly ordained or duly licensed ministers of any church or a member of a religious order."

This Bill is quite different from Oscar Ewing's "Ten-Year Plan."

MSMS

## ON THE RUN . . .

About 50 per cent of ureteral stones are passed within a week of the first symptom; some may remain in the ureter as long as 3 years without harm.

The possible presence of brain tumor should be given consideration in patients with severe hypertension.

Selected by W. S. Reveno, M.D.



# Third Annual Michigan Postgraduate Clinical Institute

Book-Cadillac Hotel, Detroit

March 23, 24, 25, 1949

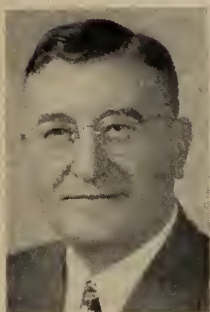
## TENTATIVE PROGRAM



HAROLD C. MACK



ERNEST H. WATSON



ROBERT C. MOEHLIG



GEORGE T. AITKEN



GEORGE L. WALDBOTT



HARTHER L. KEIM

Wednesday, March 23, 1949

### FIRST ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

SHERWOOD B. WINSLOW, M.D., Battle Creek *Chairman*

A.M.

8:55

Welcome

EDWARD F. SLADEK, M.D., Traverse City  
*President, Michigan State Medical Society*

DOUGLAS DONALD, M.D., Detroit  
*President, Wayne County Medical Society*

9:00

"Some Problems in the Surgery of the Biliary Tract"

HOWARD K. GRAY, M.D., Rochester, Minnesota  
*Head of Section in General Surgery, The Mayo Clinic;  
Professor of Surgery, the Mayo Foundation, Graduate School,  
the University of Minnesota*

9:20

"Endocrine Therapy in Gynecology"

HAROLD C. MACK, M.D., Detroit  
*Gynecologist*

9:40

"Feeding Problems, Including Demand Feeding"

ERNES H. WATSON, M.D., Ann Arbor  
*Associate Professor of Pediatrics, University of Michigan*

10:00

INTERMISSION TO VIEW EXHIBITS

11:00

"The Use of Methyl Testosterone of Migraine of Women"

ROBERT C. MOEHLIG, M.D., Detroit  
*Chief, Department of Internal Medicine, Harper Hospital;  
Associate Professor of Medicine, Wayne University College of Medicine*

11:20

"Pitfalls in the Treatment of Fractures"

GEORGE T. AITKEN, M.D., Grand Rapids

11:40

"New Trends in the Treatment of Allergic Diseases"

GEORGE L. WALDBOTT, M.D., Detroit  
*Charge of Allergy Clinics of Grace and Harper Hospitals  
and Consultant at St. Mary's Hospital, Detroit*

P.M.

12:15

LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel  
P. L. LEDWIDGE, M.D., Detroit, *Chairman*

1:15

THE R. S. SYKES LECTURE

"The Biological Differentiation of Benign and Malignant Tumors"

HARRY S. N. GREENE, M.D., New Haven, Connecticut

### SECOND ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

DEAN C. BURNS, M.D., Petoskey, *Chairman*

P.M.

2:00

"Cutaneous Lymphoblastoma"

HARTHER L. KEIM, M.D., Detroit  
*Associate Professor of Dermatology and Syphilology, Wayne University College of Medicine*

# MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

2:20 "Cardiac Care in Thyrotoxicosis"  
CHAUNCEY C. MAHER, M.D., Chicago  
*Associate Professor of Medicine, Northwestern University Medical School*

2:40 "Diagnosis and Surgical Treatment of Deafness"  
JAMES E. CROUSHORE, M.D., Detroit  
*Associate Professor of Otolaryngology, Wayne University College of Medicine*

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "Surgical Management of Peptic Ulcer"  
CHARLES S. KENNEDY, M.D., Detroit  
*Emeritus Professor of Surgery, Wayne University College of Medicine; Attending Surgeon and Chief of Surgical Staff, Grace Hospital, Detroit*

4:20 CLINICAL X-RAY CONFERENCE  
"Clinical X-Ray Investigation of the Colon"

Moderator

BEN R. VAN ZWALENBURG, M.D., Grand Rapids  
*Radiologist*

Pathology

EDWARD F. DUCEY, M.D., Grand Rapids  
*Pathologist at St. Mary's Hospital*

Surgery

LYNN A. FERGUSON, M.D., Grand Rapids  
*Medical Director of Ferguson Droste-Ferguson Rectal Clinic and Hospital; Vice Chief of Staff and Chairman of Executive Board, St. Mary's Hospital*

## THIRD ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

WILLIAM A. HYLAND, M.D., Grand Rapids, *Moderator Surgeon*

P.M.

8:00 QUESTION BOX

Pediatrics

WYMAN C. C. COLE, M.D., Detroit—  
*Chief, Department of Pediatrics, Women's Hospital*

Ear, Nose, and Throat

ANDRE J. CORTOPASSI, M.D., Saginaw  
*Secretary Active Staff of Saginaw General Hospital and member of the Department of Otolaryngology and member of consulting staff of St. Luke's Hospital*

Surgery

HOWARD K. GRAY, M.D., Rochester, Minnesota

Internal Medicine

H. MARVIN POLLARD, M.D., Ann Arbor  
*Associate Professor of Internal Medicine, University of Michigan Medical School*

Obstetrics-Gynecology

DONALD M. SCHUITEMA, M.D., Grand Rapids  
*Consultant Obstetrics and Gynecology, Blodgett Memorial Hospital, St. Mary's Hospital and Butterworth Hospital*

Orthopedics

EUGENE W. SECORD, M.D., Detroit

Pathology

WALTER A. STRYKER, M.D., Wyandotte  
*Pathologist, Wyandotte General Hospital; Assistant Professor of Pathology, Wayne University College of Medicine*

10:30 DANCE for all registrants and their ladies.  
*Host: Michigan Postgraduate Clinical Institute (Admission by card furnished complimentary to all registrants.)*

Thursday, March 24, 1949

Book-Cadillac Hotel

A.M.

8:30 REGISTRATION—Fifth Floor

EXHIBITS OPEN—Fourth Floor

## FOURTH ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

JOHN C. STAGEMAN, M.D., Pontiac, *Chairman*

9:00 "Differential Diagnosis of Jaundice"

LEON SCHIFF, M.D., Cincinnati, Ohio



JAMES E. CROUSHORE



B. R. VAN ZWALENBURG



EDWARD F. DUCEY



LYNN A. FERGUSON



WYMAN C. C. COLE



ANDRE J. CORTOPASSI



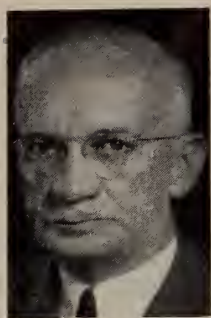
H. MARVIN POLLARD



D. M. SCHUITEMA



# MICHIGAN POSTGRADUATE CLINICAL INSTITUTE



CARL D. CAMP



IVAN B. TAYLOR



LAWRENCE S. FALLIS



O. R. YODER



WM. A. EVANS, JR.



DON MARSHALL



HAZEL R. PRENTICE



MYRTON S. CHAMBERS

- 9:20 "Geriatrics in the General Practice of Medicine"  
CARL D. CAMP, M.D., Ann Arbor  
*Professor of Neurology, University of Michigan*
- 9:40 "Practical Uses of Physical Medicine"  
FRANK H. KRUSEN, M.D., Rochester, Minnesota  
*Head of the Section on Physical Medicine, Mayo Clinic, and Professor of Physical Medicine, Mayo Foundation, University of Minnesota*
- 10:00 INTERMISSION TO VIEW EXHIBITS
- 11:00 "Anesthesia, the Weakest Link in the Surgical Procedure"  
IVAN B. TAYLOR, M.D., Detroit  
*Professor of Anesthesiology, Wayne University College of Medicine*
- 11:20 "The Importance of Preoperative Preparation of the Patient in Surgery of the Colon"  
LAWRENCE S. FALLIS, M.D., Detroit  
*Surgeon-in-Charge, Division of General Surgery, Henry Ford Hospital*
- 11:40 "Management of Peripheral Vascular Disorders"  
SIBLEY W. HOOBLER, M.D., Ann Arbor

\* \* \*

- P.M.
- 12:15 LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel  
WM. M. LEFEVRE, M.D., Muskegon, *Chairman*
- 1:15 "Political, Social and Economic Problems Facing the Medical Profession"  
L. HOWARD SCHRIVER, M.D., Cincinnati, Ohio  
*Professor of Clinical Surgery, University of Cincinnati; Past President of Ohio State Medical Association; President of Ohio Medical Indemnity, Inc.*

## FIFTH ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

WM. A. LEMIRE, M.D., Escanaba, *Chairman*

- P.M.
- 2:00 "Care and Treatment of the Psychotic Patient"  
O. R. YODER, M.D., Ypsilanti  
*Medical Superintendent, Ypsilanti State Hospital*
- 2:20 "X-Ray Diagnosis in Childhood"  
WILLIAM A. EVANS, JR., M.D., Detroit  
*Radiologist at the Children's Hospital of Michigan*
- 2:40 "The Treatment of Early Syphilis as an Out-Patient Procedure"  
UDO J. WILE, M.D., Ann Arbor  
*Professor Emeritus, University of Michigan Medical School*
- 3:00 INTERMISSION TO VIEW EXHIBITS
- 4:00 "Acute Infections of the Eye"  
DON MARSHALL, M.D., Kalamazoo  
*Chairman, MSMS Section on Ophthalmology*
- 4:20 Clinical Pathological Conference (A Surgical Case)  
HAZEL R. PRENTICE, M.D., Kalamazoo, *Moderator*  
*Pathologist*  
MYRTON S. CHAMBERS, M.D., Flint—*Medicine*  
*Internist*  
HARRY M. BISHOP, M.D., Saginaw—*Surgery*

Friday, March 25, 1949

A.M.

Book-Cadillac Hotel, Detroit

- 8:30 REGISTRATION—Fifth Floor  
EXHIBITS OPEN—Fourth Floor

## SIXTH ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

RUSSELL F. FENTON, M.D., Detroit, *Chairman*

- 9:00 "Position of the Laboratory in the Diagnosis and Control of Disease"  
FRANK W. KONZELMANN, M.D., Atlantic City, New Jersey  
*Director of Laboratories, Atlantic City Hospital*

JMSMS

# MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

9:20 "Modern Surgical Management of Pulmonary Tuberculosis"

EDWARD J. O'BRIEN, M.D., Detroit  
Professor of Clinical Surgery, Wayne University College of Medicine; Chief Thoracic Surgeon of Harper Hospital and Herman Kiefer Hospital



EDWARD J. O'BRIEN



C. S. STEVENSON

9:40 "Adeno-Carcinoma of the Fundus"

CHARLES S. STEVENSON, M.D., Detroit  
Professor of Obstetrics and Gynecology, Wayne University College of Medicine

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "Role of the General Practitioner in Child Health Care"

LEE FORREST HILL, M.D., Des Moines, Iowa

11:20 "Avoidable Pitfalls in the Office Practice of Urology"

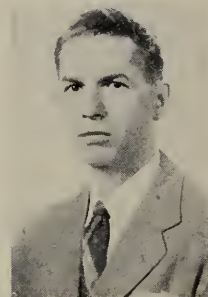
WILLIAM BROMME, M.D., Detroit  
Consultant—Urology, Veterans Hospital, Dearborn; Chief of Urology Department, Woman's Hospital; Surgeon to the out-patient Department, Harper Hospital, Detroit



WILLIAM BROMME

11:40 "How Can the Public Health Officer Help the Practicing Physician—and Vice Versa?"

ALBERT E. HEUSTIS, M.D., Lansing  
Commissioner, Michigan Department of Health



A. E. HEUSTIS

P.M.

12:15 LUNCHEON, Crystal Ballroom, Book-Cadillac Hotel  
J. MILTON ROBB, M.D., Detroit, Chairman

1:15 "Surgical Repair of Congenital Septal Defects in the Heart and a Surgical Approach to Treatment of Coronary Thrombosis"

D. W. GORDON MURRAY, M.D., Toronto, Canada  
Surgeon, Toronto General Hospital; Associate Professor of Surgery, University of Toronto



D. W. G. MURRAY



MARK R. MCQUIGGAN

## SEVENTH ASSEMBLY

Grand Ballroom, Book-Cadillac Hotel

JOSEF S. ROZAN, M.D., Lansing, Chairman

P.M.

2:00 CLINICAL PATHOLOGICAL CONFERENCE (A Medical Case)

DONALD H. KAUMP, M.D., Detroit, Moderator  
Attending Pathologist, Providence Hospital; Associate Professor of Pathology, Wayne University College of Medicine

MARK R. MCQUIGGAN, M.D., Detroit  
Associate Professor of Medicine, Wayne University College of Medicine; Chief, Department Internal Medicine, Wayne County General Hospital

LOUIS J. BAILEY, M.D., Detroit  
Instructor Clinical Medicine, Wayne University College of Medicine; Attending Physician, Providence Hospital, Internal Medicine

2:40 "Surgical Treatment of Metastatic Tumors of the Lung"

FRANK L. MELENEY, M.D., New York, New York

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "Medical and Surgical Problems of Diabetes"

HOWARD F. ROOT, M.D., Boston, Massachusetts  
Physician-in-Chief, New England Deaconess Hospital; Associate in Medicine, Harvard Medical School

4:20 "Modern Practice of Gynecology"

F. BAYARD CARTER, M.D., Durham, North Carolina

4:40 "Preoperative and Postoperative Care"

ISAAC A. BIGGER, M.D., Richmond, Va.



LOUIS J. BAILEY



WM. A. HYLAND

END OF 1949 INSTITUTE

After the Institute, Plan on Attending the  
HEART AND RHEUMATIC FEVER DAY

Saturday, March 26, 1949

Book-Cadillac Hotel, Detroit

(Program follows)



MICHIGAN POSTGRADUATE CLINICAL INSTITUTE  
HEART AND RHEUMATIC FEVER DAY

Saturday, March 26, 1949  
Book-Cadillac Hotel, Detroit



S. ROTHBARD, M.D.



LEO M. TARAN, M.D.



HELEN B. TAUSSIG



C. R. HANLON, M.D.

**Morning Program—Grand Ballroom**

*Presiding: E. F. SLADEK, M.D., Traverse City,  
President, Michigan State Medical Society*

**Rheumatic Fever**

A.M.

9:30

**Introductory Remarks**

FRANK VAN SCHOICK, M.D., Jackson  
*Chairman, Michigan State Medical Society Rheumatic Fever  
Control Committee*

9:45

**"The Relationship of Streptococcal Infections to Rheumatic Fever"**

SIDNEY ROTHBARD, M.D.  
*Chief, Division of Pulmonary Diseases, Montefiore Hospital,  
New York City*

10:15

**"Diagnosis and Treatment of Rheumatic Fever and Rheumatic Heart Disease"**

LEO M. TARAN, M.D., New York City  
*Medical and Research Director, St. Francis Sanatorium for  
Cardiac Children*

10:45

**"Community Organization for the Control of Rheumatic Fever"**

GEORGE M. WHEATLEY, M.D., New York City  
*Assistant Vice President, Metropolitan Life Insurance Com-  
pany*

11:15

**Question and Round Table Discussion.**

\* \* \*

12:00

**Noon Program—Crystal Ballroom**

*Presiding: EMMET RICHARDS, Alpena, Michigan  
President, Michigan Society for Crippled Children and  
Adults, Inc.; Chairman, Michigan Crippled Children Com-  
mission*

P.M.

12:15

**"Some Common Difficulties in the Interpretation of Chest Pain"**

TINSLEY R. HARRISON, M.D., Dallas, Texas  
*President, American Heart Association*

1:00

**LUNCHEON**

1:45

**"The Michigan Rheumatic Fever Control Program"**

L. FERNALD FOSTER, M.D., Bay City  
*Secretary, Michigan State Medical Society*

\* \* \*

**Afternoon Program—Grand Ballroom**

*Presiding: WARREN B. COOKSEY, M.D., Detroit  
Chairman, Michigan Heart Association*

**Congenital Heart Disease**

2:00

**"Diagnosis and Pediatric Care of Children with Congenital Heart Disease"**

HELEN B. TAUSSIG, M.D., Baltimore, Maryland  
*Physician in charge of Cardiac Clinic, Harriet Lane Home,  
Johns Hopkins Hospital; Associate Professor of Pediatrics,  
Johns Hopkins Hospital*

3:00

**"Surgery in Cases of Congenital Heart Disease"**

C. ROLLINS HANLON, M.D., Baltimore, Maryland  
*Assistant Professor of Surgery, Johns Hopkins University and  
Johns Hopkins Hospital*

3:45

**Questions and Round Table Discussion**

4:30

**Adjournment.**

**END OF HEART DAY**

## INTERIM SESSION, AMERICAN MEDICAL ASSOCIATION

St. Louis, November 27 to December 3

This session started out with a very active program on Public Relations on Saturday, November 27. There was much discussion, many proposals, and a very evident demand upon the part of the states that the American Medical Association enter actively into a public relations and public education campaign, especially in view of the increased efforts of the socializers to introduce socialized medicine into America.

### State Secretaries and Editors

November 28 and 29 was the Annual Conference of the State Secretaries and Editors. This group has been meeting for many years, the first meeting being in St. Louis at the annual meeting of the American Medical Association in 1910. Your present editor attended that meeting and the two succeeding ones. This present meeting was one of the best that it has been our privilege to attend.

General Geo. F. Lull, Secretary of the AMA, outlined briefly the purposes of the conference, a very small part of its history and expressed the wishes of the AMA for a beneficial meeting.

Roscoe L. Sensenich, president of the American Medical Association, talked, expressing the thought that bad publicity is given to medical affairs and quoted from a front page article in the *New York Times*, calling for censure of the new President of the New York Academy of Medicine because he said some unkind things about certain officers of the Medical Forum, which is a group of doctors trying to socialize medicine. We thought praise should have been bestowed.

Edward J. McCormick, Trustee of the AMA, spoke at length on medical legislation from the viewpoint of the Board of Trustees and outlined activities which should be adopted throughout the profession, even to the county medical societies and individuals to present medicine's belief in regard to socializing medicine. He called upon the AMA to adopt an aggressive attitude. He said that every doctor owes a duty to his profession and, no matter how busy, should take time to render some active service to the profession. Too many are devoting their whole time to practice and none to the social problems. If we are to prevail in our fight against socialized medicine, the whole 190,000 members must become active instead of only about 1500 who are now aggressively active.

Dr. Dwight H. Murray, Trustee of the AMA, from California, talked along much the same line, only he went into detail as to things which should be done.

Mr. Forrest A. Harness, Chairman of the Committee of the House on Expenditures in Government Departments, told of the efforts being made by the socializers in Government who are taking advantage of every opportunity to get their biased stories in print, on the radio, and before the public in every possible manner. They are spending millions of dollars of Government

money to give the public false information or colored information. A sample was the radio broadcast of Warner, Saturday, Nov. 27, who used unproven facts from the Ewing report and other sources, telling the public about the 300,000 deaths a year which could have been prevented if there were adequate medical care. Incidentally 40,000 of those 300,000 deaths were accidental deaths which under no conceivable manner could have been prevented by medical care. The rest of them have never yet been specified. Mr. Harness stressed the fact that bad news is made spectacular. Very rare and occasional cases are played up to make a bad impression. The medical profession through their practice of ethics have played down their part in public interest stories while our detractors built up the stories which may be slanted to give an impression unfavorable to us. He stressed that socialized medicine is the first step in the tide of national socialism.

The Symposium on Osteopathy in its Relation to Medicine brought out the fact that the number of students taking osteopathy is gradually decreasing.

The afternoon session was divided into three conferences:

(1) Medical Service radio programs which stressed their importance as a means of publicity.

(2) Medical-hospital pre-payment plans, in which Dr. Robert L. Novy of Detroit took part. The speakers traced the history of the prepayment plan, outlined the various types: The indemnity plan, which prevails in Ohio and various states, the service plan of which Michigan Medical Service is a primary example, and the co-operatives which are especially in Minnesota. There are advantages in each and disadvantages. The service plan seemed to be the most satisfactory, but the indemnity plans the easiest to administer. The co-operatives as used in Duluth, Minnesota, are quite unsatisfactory from a medical standpoint.

(3) Medical legislation, of which Charles Crownhart, Secretary of the State Medical Society of Wisconsin, acted as chairman, Edward J. McCormick of Toledo and Dwight H. Murray of Napa, California, Trustees of the American Medical Association, as speakers. They talked very intimately about the problems which face us in the near future and discussed plans for meeting these problems.

In the evening, a clinic was held on State Medical Journals. Four journals were considered: *Arizona Medicine*, *The Pennsylvania Medical Journal*, *The Journal of the South Carolina Medical Association*, and the *Texas State Journal of Medicine*. John Lamoreaux of St. Louis, The Warwick Press, talked about format and typography. He discussed each journal, pointing out advantages and disadvantages of styles of type, width of reading columns, spacing between columns, et cetera.



He had valuable suggestions which the editors of the other medical journals could apply to their own journals. Edwin P. Jordan, of Cleveland, talked about the editorial content of the journals, what an editorial should be, its structure and value. He said that a well-written editorial should be the most interesting and most valuable part of any publication, but many editorials have not received the strict study and attention which they deserve. Most of those in the journals he studied were either merely news items or purely scientific dissertations.

Mr. Harry C. Phibbs of the Harry C. Phibbs Company talked about advertising and make-up of journals. He supported an observation made by Mr. Lamoreux that medical advertising seems to be the best thought-out and worked-up of all types of advertising. Advertising, such as is used in the state medical journals, is really a credit to the technical make-up of the magazine and the skill and enthusiasm of the advertising public. He says medical advertising, in order to be worth while, should add something to the information of the reader and that if the readers of the state medical journals will comment occasionally to the advertiser, the interest can be maintained. The advertising carries most of the expense of the journals, and justly so, but if this is to be continued, the advertisers must be assured of interest from the readers.

Monday morning, Dr. Paul R. Hawley talked to the group about the medical and hospital care prepayment plans and urged that every doctor use every effort to make these succeed. They must succeed, if socialized medicine is to be avoided.

Dr. James C. Sargent, Chairman of the Council on National Emergency Medical Service, talked about the medical care of the nation in the event of another war, which is a very real threat at the present time. He says it is known that another war will strike without warning and with the destruction of about fifteen of our major manufacturing centers. They have bombs now many times as powerful as that dropped on Hiroshima. That one injured or killed approximately 180,000 persons, 30,000 immediately dead and another 30,000 soon after. Dr. Sargent said 90 per cent of the doctors in a stricken area would be dead or completely incapacitated and medical help, as well as all other, must come from communities 50 to 125 miles away.

Captain R. H. Gregor of the Navy Medical Corps talked about injuries from atomic and incendiary bombing war and the treatments. He showed a moving picture, lasting ninety minutes, of the two bombs dropped on Japan and their effects upon the population. He said that in treating such a disaster no attention would be paid to anybody within the 1500 meter range because they would not live, and in such a disaster the care must be given to those who have a chance to live. Both Captain Gregor and Dr. Sargent urged that each state make immediate preparations to care for such a disaster. Incidentally, the Michigan State Medical Society has a committee on this subject which has made a report to the Governor, but so far as we know, nothing has come of that report. It is known that Detroit and that area would be bombed immediately, and that both medi-

cal aid and relief in the way of food, clothing and shelter would have to come from as far away as Jackson, Lansing, Battle Creek, Saginaw and Bay City. The Detroit area would be destroyed, and Flint and the Ann Arbor area would be very seriously crippled.

#### Fourth Grass Roots Conference

The fourth Grass Roots Conference for county medical society officers, and others interested, was held in the Crystal Room of the Hotel Jefferson in Saint Louis, Monday evening, November 30, 1948, and consisted of two panel discussions.

1. The first panel was on the Relation of the Doctor to National Preparedness. Brig. Gen. George E. Armstrong, Deputy Surgeon General, told of the problems of the Army, the need for medical officers and the absolute necessity to secure them. He said that no one would have to be drafted into the Medical Service if those who had a duty which has not yet been performed would take action according to their responsibility. There is a direct need for approximately 4,000 doctors in the Army and Air Corps. These departments will lose 2,500 within the next six months, mostly young men not yet established in practice, and largely those who have had most of their training at Government expense. They also believe they have given the required service, but they have been exempt from a shooting war. There are other men throughout the nation who escaped service during the war for various reasons, some of which were that they were essential. But that excuse no longer holds. Medical officers are an absolute necessity, and there are many compensations to military service. Conditions are not the same as they were during the war. We are assured that men will not be called to service to sit and wait for something to do.

Rear Admiral Joel T. Boone of the Navy, Executive Secretary of the Committee on Medical and Hospital Services, told of a study just completed which has surveyed all the military hospital and medical installations, Army, Navy, Marine, Public Health. Many recommendations have been made for simplified operation, including the use of joint procurement of supplies and joint use of medical personnel.

Norvin C. Kiefer, M.D., Senior Surgeon, Office of the Surgeon General, USPHS, told of the civilian aspects of the problem of national preparedness, and stressed the fact that in the next war there will be no warning, other than we are now getting. It will be an all-out war, with the civilians just as much in it as the military. We shall have to know the problems of atomic and other new methods of warfare, and how to cope with emergency situations.

Richard L. Meiling, M.D., Council on National Emergency Medical Service of the AMA, told of his studies in this problem, and his certain knowledge of the needs of preparation, needs of the military forces for medical men, and the certainty that they must be obtained. It is the first duty of men under forty-five who have not had active fighting military service to make themselves available. Otherwise, a draft may be necessary.

2. The second panel was on Socialized Medicine.

Maurice H. Friedman, M.D., told of his studies of the Ewing Report, and its deliberate statements for the purpose of propaganda. He mentioned the 300,000 who die every year because of lack of necessary medical attention. This number is also stated as 325,000. It includes 40,000 who die of accidents, and some thousands who die of infectious diseases which we have the knowledge to prevent, but the list of the 325,000 has never been given. Ewing also uses the old exploded draft statistics, telling of the five million rejected but fails to tell that every Four F who was called back for re-examination was another statistic, being counted several times, and those who volunteered were not counted at all.

Louis H. Bauer, M.D., told of experiences in all parts of the world, how the medical men in countries which have socialized medicine want none of it and warn us to keep out.

#### House of Delegates

The most important part of the Interim Session of the American Medical Association, of course, was the House of Delegates, which convened for two days. Much important business and many resolutions were presented and acted upon by the reference committees and the House as a whole. Many resolutions were introduced, pointing to the American Medical Association's assuming leadership in the program against socialized medicine. There was a general belief that this should not be left to independent organizations or committees, and that the Association should raise dues sufficient to cover the added expense with suggestions all the way from \$10 to \$100. The resolution was finally reported out of committee, and, while being considered, another resolution was

presented by the Board of Trustees assessing the State Medical Associations the amount necessary to carry on this work. That motion was voted down. In considering this question, the House went into executive session (closed session), which admits any member of the American Medical Association, but excludes civilians other than those employed by the American Medical Association or state headquarters. Final action was taken on the motion, instructing the Board of Trustees to engage upon an educational program and to enlarge the Washington office to take care of the increased duties there. Also an assessment of dues of \$25 was levied upon each member.

Another important action was that regarding the national sales agency for the American Medical Care Plans Commission. There were several resolutions on this subject: One from Michigan, one from Ohio, and one from Oregon. All were rejected, and the secondary report of the Council on Medical Service adopted. This report recognizes the need for a national sales program, suggesting a co-operative agency. The report stated that not sufficient evidence had been presented to show the need of an insurance company. In the hearing before the Reference Committee, plenty of evidence was presented and a report by Mr. Van Dyne of New York who has been operating a co-operative plan for five years showing its inadequacies, but this was disregarded. The vote to adopt this report carried, and the American Medical Association has now officially taken out of the hands of the Blue Shield Commission the extension of our Blue Shield services on a national basis. The Council on Medical Service, however, was instructed to establish forthwith medical service plans wherever feasible and wherever they are not now in operation.

## University of Michigan

### *Postgraduate Course in Anatomy*

February 10-May 26 (Thursdays)

Courses in Anatomy under the direction of Professor Russell T. Woodburne are offered to physicians wishing a review in this field. Such courses have been requested especially by surgeons and those preparing for specialty board examinations.

Course A will cover the upper half of the body consisting of the head, neck, thorax and upper extremities.

The courses will run simultaneously. They will be given in the East Medical Building, Ann Arbor, on Thursdays beginning February 10, at 1:00 P.M., and end May 26. The first part of the afternoon will be devoted to informal lectures, followed by practical studies in the Anatomical Laboratory. The evening hours to 10:00 o'clock will be devoted entirely to laboratory work.

Graduate or postgraduate credit may be arranged. Enrollment is limited. Fee \$40.00 for either course.

REGISTRANTS WILL PROVIDE THEIR OWN DISSECTION INSTRUMENTS, GOWNS, TEXTS AND REFERENCE BOOKS.

Write Department of Postgraduate Medicine, 1313 E. Ann St., Ann Arbor, Michigan.



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# Constitution\*

## ARTICLE I—NAME

Section 1. The name of this organization shall be The Michigan State Medical Society.

## ARTICLE II—COMPONENT COUNTY SOCIETIES

Section 1.—Component County Societies.

Component County Societies shall consist of those County Medical Societies which hold charters from this State Medical Society.

Sec. 2.—Geographical Scope.

Only one component County Society shall be chartered in any one county of the State; provided, however, when in the judgment of the House of Delegates it is deemed to be to the best interests of this Society, a charter may be granted to a component County Society comprising two or more counties.

## ARTICLE III—PURPOSES

Section 1. To bring into one organization the Doctors of Medicine of this State of Michigan, and through it and other similar societies of other states to form and maintain the American Medical Association.

Sec. 2. To maintain a program of educational service to the public on matters of health and hygiene.

Sec. 3. To encourage among members of the medical profession the interchange of views on all phases of professional advancement and thus better to equip each member of the profession to serve society and promote the public health.

Sec. 4. To maintain a program of scientific education for the members of The Society keyed to the constantly developing discoveries in the field of medicine; and to foster, encourage and co-ordinate postgraduate facilities for the medical profession as a whole.

Sec. 5. To disseminate advances in medical research among the profession generally, by the issuance of scientific publications.

Sec. 6. To maintain and to advance the standards of medical practice in this State with respect to the highest concepts of ethics.

Sec. 7. To acquire and hold such real and personal property as may be necessary for the full and proper execution of the corporate purposes as detailed herein.

Sec. 8. To carry on such organization, functions and activities as are deemed necessary to accomplish effectively the above purposes; provided, however, that the Society shall engage in no activities that cannot be construed as relevant, incidental or necessary to its charitable, educational and scientific purposes.

## ARTICLE IV—DIVISIONS

Section 1. This Society as a State unit of the American Medical Association, and as the State expression of the County Societies of Michigan, shall have three major divisions.

1. The Society as a whole, as when it meets in Annual Session.

2. The Scientific Assembly with its subordinate or related bodies.

3. The House of Delegates with its subordinate or related bodies.

## ARTICLE V—THE SOCIETY AS A WHOLE

Section 1. The Society as a whole shall hold an Annual Session at such time and place and of such duration as the House of Delegates may determine. This power may be delegated to The Council or to the Executive Committee of The Council by the House of Delegates.

## ARTICLE VI—SCIENTIFIC ASSEMBLY

Section 1. The Scientific Assembly of this Society is the convocation of its members for the presentation and discussion of subjects pertaining to the science and art of medicine, its allied specialties and the problems of public health conservation.

## ARTICLE VII—HOUSE OF DELEGATES

Section 1. The House of Delegates shall be the legislative body of the Michigan State Medical Society and shall consist of Delegates elected by component County Societies and Delegates-at-Large, as prescribed by the By-Laws.

## ARTICLE VIII—MEMBERS

Section 1. This Society shall consist of active members, honorary members, associate members, retired members, members emeritus, life members and military members, elected in accordance with the By-Laws.

## ARTICLE IX—OFFICERS AND ELECTED REPRESENTATIVES

Section 1. The officers of this Society shall be a President; a President-Elect; a Treasurer; a Secretary; a Speaker and a Vice Speaker of The House of Delegates; and Councilors.

Sec. 2. The elected representatives of this Society shall be the Delegates and the Alternate Delegates to the House of Delegates of the American Medical Association.

## ARTICLE X—COUNCIL

Section 1. The Council shall be the Executive Body of the Society. It shall consist of one Councilor from each Councilor District, the President, President-Elect, immediate Past President, Speaker of the House of Delegates, with the Secretary and the Treasurer, the last two being elected by the foregoing. It shall have the custody and entire control of all funds and property of the Society and shall act for the Society as a Whole and for The House of Delegates between sessions.

Sec. 2. The Executive Committee of The Council shall consist of its Chairman; Vice Chairman; Chairman of the Finance Committee; Chairman of the County Societies' Committee; Chairman of the Publication Committee; President; President-Elect; Secretary and the Speaker of the House of Delegates. It shall act for the Society as a whole and for the House of Delegates between sessions of The Council, except that a policy established by the House of Delegates or by The Council shall not be changed.

## ARTICLE XI—FUNDS AND EXPENSES

Section 1. Funds for meeting the expenses of the Society shall be raised by annual dues, special assessments and voluntary contributions.

Sec. 2. Annual membership dues and assessments shall be fixed by the House of Delegates.

## ARTICLE XII—AMENDMENTS

Section 1. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates seated at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published at least once during the year in THE JOURNAL of the Society, or sent officially to each component County Society at least two months before the meeting at which final action is to be taken.

Sec. 2. This Constitution or any amendment thereto shall become effective immediately upon its adoption.

\*As revised by the House of Delegates, September 21, 1948.



# By-Laws

## CHAPTER 1—COMPONENT COUNTY SOCIETIES

Section 1. The charter of each component County Society shall require that each of the provisions of the Constitution and By-Laws of the Michigan State Medical Society, together with each amendment to either thereof, hereafter adopted, in so far as the same is applicable, shall be an integral part of the Constitution and By-Laws of the component County Society to which a charter is issued and shall in no way be inconsistent with the Constitution and By-Laws of the Michigan State Medical Society. Each charter shall be authorized by the House of Delegates and signed by the President and the Secretary of this Michigan State Medical Society.

Sec. 2. The House of Delegates is empowered to revoke the charter of any Component County Society whenever it finds that such Society has materially breached any of the provisions of the Constitution or By-Laws of this State Society or has failed to function within the expressed spirit and purpose of this State Society to such an extent that revocation of charter is compatible with the best interests of this State Society. Petition for the revocation of charter of any component County Society may be filed with The Council by a Councilor of the district within which each Society is located, or by any three members of The Council of this State Society or by the President of this State Society. Such petition shall be in writing and set forth with reasonable particularity the matters complained of and upon which the petition is founded. A copy of such petition together with written notice of the time and place of hearing on the petition shall be served on the affected component County Society by registered mail, return receipt requested, not less than 60 days before the date of such hearing. The affected component County Society may, within 30 days after service upon it of copy of the petition, file with The Council by registered mail, return receipt requested, a written answer thereto. The Council shall afford the affected component County Society a fair hearing of the matters complained of and a suitable opportunity to present its defense. The component County Society may be represented by legal counsel. Written arguments may be filed on behalf of the affected component County Society and by the petitioner. Stenographic notes shall be made of the entire proceedings on such hearing and a complete record shall be prepared, which record shall consist of the petition, answer, testimony, exhibits, written arguments and other pertinent matter. The Council shall make its decision based on the records, setting forth in writing its finding of facts, conclusions and reasons therefor. If two-thirds of the members of The Council do not concur in the conclusion that the charter of the affected component County Society should be revoked, the petition shall be deemed dismissed and the proceedings ended. If two-thirds of the members of The Council concur in the conclusion that the charter of the affected component County Society should be revoked, the Chairman of The Council shall transmit to the House of Delegates a report, consisting of the decision of The Council with all records annexed, and shall serve a copy thereof on the affected component County Society. The House of Delegates shall at the next regular or special session thereof following the transmittal of such report, consider and take such action on the report as it may deem proper. In case the House of Delegates desires further proofs in relation to the issues involved, it may remand the matter to The Council for further hearing and report. The action of the House of Delegates on the report of The Council shall be the final decision with reference to the revocation of the charter of a component County So-

ciety. Provided, that the component County Society, if it feels aggrieved by the decision of the House of Delegates, may, within six months, appeal to the Judicial Council of the American Medical Association, whose opinion shall be final.

## CHAPTER 2—REGULATION OF MEMBERSHIP

Section 1. Each component County Society shall be the judge of the qualifications of its own members; but, as such societies are the only portals to this State Society and the American State Medical Association, each reputable practitioner of medicine who meets the requirements specified in the By-Laws, Chapter V, shall be eligible to active membership.

Sec. 2. A Doctor of Medicine whose principal location of practice is near a county line may hold his membership in that component County Society most convenient for him to attend, on permission of The Council of the Michigan State Medical Society.

Sec. 3. Each component County Society shall have general direction of the affairs of the profession in the county, and its influence shall be exerted constantly for bettering the scientific, the moral and material conditions of every Doctor of Medicine in the county; systematic effort shall be made by each member and by the component County Society as a whole to increase the membership until it embraces every eligible Doctor of Medicine in the county.

Sec. 4. The Secretary of each component County Society shall keep a roster of its members and if practicable a list of non-affiliated Doctors of Medicine in the county, and other Doctors of Medicine, such as commissioned officers of the Navy, Army, and Public Health Service, in which shall be shown the full name, the address, the college and date of graduation, the date of license to practice in this State, and such other information as may be deemed necessary.

Sec. 5. Each member of a component County Society, who is in good standing, shall be privileged to attend each meeting and take part in all the proceedings and shall be eligible to any office within the gift of the Society except as otherwise provided.

Sec. 6. In addition to the qualifications specified in their respective Constitution and By-Laws, County Societies shall exact as qualifications for membership and its continued tenure, the acceptance and adherence to the Principles of Medical Ethics of the American Medical Association in accordance with the interpretation thereof by the Judicial Council of the American Medical Association, and such other qualifications as may be provided by this Constitution and By-Laws.

Sec. 7. No member who is under sentence of suspension or expulsion from any component County Society of this State Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this State Society.

## CHAPTER 3—ARREARS IN DUES

Section 1. Any member in arrears for dues in the amount for one year may regain membership by paying up all back dues. Any member in arrears for more than one year may regain membership by paying all back dues or by being elected again to membership, at the option of the Component County Society.

Sec. 2. For the purpose of determining the dues for new members only, the fiscal year of the Michigan State Medical Society shall be divided into four three-month periods. New members shall pay adjusted annual dues and assessments for the unexpired quarterly periods of that year. Such new members shall not be entitled to membership benefits until their election to membership



has been duly reported to the Secretary of the State Society and such benefits shall not cover any period prior to their becoming members in good standing.

#### CHAPTER 4—TRANSFER OF MEMBERSHIP

Section 1. Transfer of membership from one component County Society to another, occasioned by a change in location, shall be effectuated in the following manner: The member who wishes such transfer shall make application to the County Society which he wishes to join, and tendering payment of dues for the remainder of the current year, calculated to the nearest quarter.

Sec. 2. The Secretary of the component County Society to which application is made shall request certification of standing from the component County Society in which membership is held. Upon receiving such request, The Secretary of the latter society shall supply certification of good standing, provided the following requirements have been met:

- (a) All component County Society dues and assessments shall have been paid for the calendar year previous to the year in which application for transfer is made.
- (b) Full State Society dues and assessments shall have been paid for the year in which application for transfer is made.
- (c) Component County Society dues and assessments shall have been paid to cover that portion of the year in which application for transfer is made, the time being calculated to the nearest quarter.
- (d) The member shall not be under suspension or facing charges of unethical conduct.

Section 3. (a) In case the component County Society dues have been paid in full for the year, and certification of good standing is being issued, the Secretary of that component County Society shall refund component County Society dues represented by the unexpired portion of the year, calculated to the nearest quarter.

(b) Upon receipt of certification of good standing, and favorable action by the component County Society to which application has been made, the transfer of membership shall be in effect.

Sec. 4. Resignation for transfer of membership to another State Society shall be effectuated in the following manner:

Any member in good standing, not facing charges of unethical conduct, whose State and component County Society dues and assessments are not in arrears, and who has moved his principal location to another State, may tender his resignation, which shall be effective at the beginning of the next quarter. Such resignation shall be transmitted to the Secretary of the Michigan State Medical Society, who shall give the departing member certification of good standing.

Provided the portion of the calendar year following such resignation is not less than one-quarter, the Secretaries of the State and component County Societies shall refund any dues and assessments already paid for the remainder of the year, calculated to the nearest quarter.

#### CHAPTER 5—MEMBERSHIP AND CLASSIFICATION OF MEMBERSHIP

Section 1. Active Member—Active Members shall comprise all the active members of component County Societies. To be eligible for active membership in any component County Society, a Doctor of Medicine must hold an unrevoked license to practice medicine, surgery and midwifery by authority of the Michigan State Board of Registration in Medicine, and comply with all other provisions of this Constitution and By-Laws.

Sec. 2. Honorary Member—Component County Societies may elect as an Honorary Member any person

distinguished for his services or attainments in medicine or the allied sciences, or who has rendered other services of unusual value to organized medicine or the medical profession. Upon recommendation of a component County Society, the House of Delegates may elect such a person as Honorary Member of the State Society. An Honorary Member shall pay no dues to the State Society and shall be without right to vote or hold office in either component County or State Society.

Sec. 3. Associate Member—Component County Societies may elect as an Associate Member:

- (a) Any person not a member of the profession but engaged in scientific or professional pursuits whose principles and ethics are consonant with those of this State Society.
- (b) An intern serving the first year in any approved hospital, an intern of longer standing, a resident physician in training, and a teaching fellow not engaged in private practice, but not after six years from the receipt of first medical degree (M.D. or M.B.); provided his training has not been interrupted by exigencies of War Service or by totally incapacitating illness.
- (c) A Doctor of Medicine, resident of the State of Michigan, for the period of time he is in active Military Service of the United States previous to his engaging in active practice.
- (d) A Doctor of Medicine not engaging in any phase of medical practice.
- (e) A commissioned medical officer of the United States Army, Navy, Public Health Service on duty in this State, who is not engaged in private practice of medicine, not to exceed two years.
- (f) An Active Member, by transfer, for the period of time he is temporarily out of active practice on account of protracted illness.

Upon recommendation of a component County Society, the House of Delegates may elect such a person as an Associate Member of this State Society. An Associate Member shall not pay dues to this State Society. He shall not have the right to vote, nor hold office in either component County or State Society. Component County Societies may require an Associate Member to pay certain local dues, out of which THE JOURNAL of the Michigan State Medical Society subscription is to be paid to the State Society for which each such Associate Member shall receive THE JOURNAL of the Michigan State Medical Society.

Sec. 4. Retired Member—A member who has maintained membership in a component County Society of this State Society for a period of ten or more years, and who is certified by the component County Society as having retired from practice, may be transferred to the retired members' roster. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine. He shall not have the right to vote or hold office.

Sec. 5. Member Emeritus—Any Doctor of Medicine who has been in the practice of medicine for fifty years, and who has maintained a membership in good standing for twenty-five consecutive years, may, upon recommendation of his component County Society with his consent, be elected a Member Emeritus by the House of Delegates. A member Emeritus shall be relieved from paying dues. He shall be entitled to all the benefits and privileges of membership.

Sec. 6. Non-Resident Member—Component County Societies may elect as a Non-Resident Member any Doctor of Medicine residing and practicing outside of The County who is a member in good standing of his own component County Society. A Non-Resident Member shall not have the right to vote or hold office.



Sec. 7. Life Member—A Doctor of Medicine who has attained the age of seventy years and maintained an active membership in good standing for twenty-five consecutive years in this State Society, may, upon his application, and recommendation of his component County Society, be transferred to the Life Members' Roster. He shall have the right to vote and hold office but shall pay no dues to the State Society. Requests for such transfer shall be accompanied by certification by The Secretary of The State Society as to years of membership in good standing. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine.

Sec. 8. Military Members. Any active member in good standing who serves on active duty in the military forces of the United States during a war or similar national emergency may be transferred to the Military Membership roster for the period of time he is in Service. A Military Member shall not be required to pay state dues and assessments during the period of his Service and for the balance of the year in which he is separated from Military Service provided that this remission of postservice dues and assessments shall not be less than six months, or during the years he may be totally disabled immediately following such duty.

Sec. 9. Only active members are eligible to Retired, Emeritus or Life Membership. The Component County Society of such members shall make request for certification, in writing, to The Secretary of The State Society thirty days in advance of an Annual Session of The House of Delegates. Requests for transfer shall be accompanied by certification by the Secretary of the State Society, as to years of practice and years of membership in good standing. Transfers shall be by election in the House of Delegates.

Sec. 10. Any change in membership status shall be effected by resolution presented in triplicate before the annual meeting of the House of Delegates after previous certification by the secretaries of the county and state societies.

## CHAPTER 6—DISCIPLINE OF MEMBERSHIP

Section 1. A component County Society may expel, suspend or otherwise discipline any of its members in accordance with the provisions of its constitution and by-laws; provided, however, that any member against whom such action is proposed shall be accorded the benefit of the following procedures:

Sec. 2. Efforts at conciliation and adjustment of differences shall precede formal complaint against a member sought to be disciplined.

Sec. 3. Petition for expulsion, suspension or other discipline of a member shall be in writing, signed by the majority of the Ethics Committee of his component County Society or by not less than 10 per cent of the members of the Society, and shall set forth with reasonable particularity the matters complained of.

Sec. 4. A copy of the petition, together with notice of the time and place of hearing shall be served on the affected member not less than 30 days prior to the date of hearing. This notice is to be sent by registered mail, return receipt requested.

Sec. 5. The affected member may file with his component County Society, or a suitable committee thereof, a written answer within fifteen days after service upon him of a copy of such petition. He shall be accorded a fair hearing of the matters complained of before the Ethics Committee of his component County Society and afforded an opportunity to present his defense, either in person or by counsel.

Sec. 6. In the event that a hearing shall have been had before an appropriate committee of a component County Society as provided in Section 3, Chapter VI of these By-Laws, such committee promptly after the conclusion of said hearing shall make a report in writing to the component County Society, setting forth its finding of facts, conclusions and reasons therefor, as

well as its recommendations for an appropriate order to be made by the component County Society in relation to the matter heard by such committee.

Sec. 7. A stenographic record shall be made of the proceedings at the hearing, and in case an appeal is taken by such member, a transcript thereof shall be prepared at the expense of the component County Society for transmittal, if required, to the State Society. In such case, a copy of the transcript shall be furnished to the appellant as soon as may be.

Sec. 8. Any order of a component County Society for expulsion, suspension or other discipline of a member shall be in writing, and shall set forth findings of fact, conclusions and reasons therefor. A copy of such order shall be served on the affected member as soon as may be.

Sec. 9. The Ethics Committee may reprimand or counsel a member; however, discipline must be meted out by the Society as a whole or its Council. A two-thirds vote of the members present of the component County Society or its Council, due notice having been given, is necessary for expulsion or suspension of a member.

Sec. 10. The affected member shall have an opportunity to avail himself of his rights of further appeal according to the following procedure: Appeal to The Council of this State Medical Society; appeal to the House of Delegates of this State Medical Society; and final appeal to the Judicial Council of the American Medical Association. A member deeming himself aggrieved by an order of expulsion, suspension or other discipline made by a component County Society Council may appeal to his component County Society.

Sec. 11. Notice of appeal to The Council of the Michigan State Medical Society shall be in writing and set forth the specific reasons for such appeal. The notice shall be filed with said Council and a copy thereof served on the member's component County Society. Unless such appeal is taken within 30 days after service by registered mail, return receipt requested, of the copy of the order of discipline on the affected member, such order shall be final and effective. As soon as practicable after receiving copy of notice of appeal, the component County Society shall forward to The Council of the Michigan State Medical Society a complete record of the case, which record shall consist of the petition, answer, testimony, order appealed from, and all other pertinent writings and exhibits. The Council shall thereon transmit such record together with the notice of appeal to the Committee on Ethics of this State Society for review. The Committee on Ethics shall promptly review the record and may request the component County Society or the affected member to furnish each further proof in writing as the Committee deems necessary for the proper and full review of the matter. Written arguments may be filed by the component County Society and the affected member within such time as may be designated by the Committee on Ethics. The Committee on Ethics shall make its findings and recommendations in writing and report the same to The Council of the Michigan State Medical Society. The Council shall thereupon, after careful hearing, orally and/or in writing, and consideration of facts and exhibits, affirm, reverse or modify the order appealed from by written decision, a copy whereof shall be served on the component County Society and the affected member. Unless, within 60 days of the service upon him and his component County Society by registered mail of copy of such decision, the member or the component County Society takes a final appeal to the Judicial Council of the American Medical Association, the decision of The Council of the Michigan State Medical Society shall be final and effective.

Sec. 12. A member of a component County Society whose license to practice medicine in this State has been revoked shall be dropped from membership automatically as of the date of revocation.



## CHAPTER 7—GENERAL SESSIONS

Section 1. During each Annual Session the Society shall hold one or more General Meetings. The number and time of these General Meetings shall be determined by The Council of the Michigan State Medical Society. Such General Meetings shall be presided over by the President or in his absence the President-Elect or the Chairman of The Council. One such meeting shall be called "Officers Night." At this meeting called "Officers Night," the report of the House of Delegates shall be rendered.

Sec. 2. The following shall be the items of business:

1. Call to Order.
2. Announcements and reports of the House of Delegates.
3. Retiring President's annual address.
4. Induction into office of incoming President.
5. Introduction of newly elected officers and elected representatives.
6. Special addresses.
7. Resolutions and motions.

Sec. 3. Each registered member at an Annual Session shall have an equal right to participate in the deliberations of a General Meeting and each Active Member, Member Emeritus and Life Member so registered shall have the right to vote on pending questions before the General Meeting.

Sec. 4. At any General Session or at any Section Meeting of this State Society, there may be recommended to the House of Delegates or to The Council the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and the public. Such investigations and reports shall not become official action or expression of this State Society until approved by the House of Delegates or The Council.

## CHAPTER 8—HOUSE OF DELEGATES

Section 1. Composition—The House of Delegates shall be composed of Members elected by the Component County Societies. Reports having been properly filed with the Secretary of this Society, each component County Society shall be entitled to send to the House of Delegates each year one delegate for each fifty members and one delegate for each additional major fraction thereof. Any component County Society having less than fifty members shall be entitled to send one delegate.

Sec. 2. Officers of this State Society and members of The Council shall be ex-officio members of The House of Delegates, and, with the exception of The Speaker of The House of Delegates, shall be without power to vote in The House of Delegates. The Past-President shall be a member at large of The House of Delegates during the first year of Past-Presidency with right to vote and hold office. All other Past-Presidents shall have the privilege of the floor, without the right to vote.

Sec. 3. The House of Delegates shall transact all of the business of this State Society not otherwise specifically provided for; it shall adopt rules and regulations for its own government and for the administration of the affairs of The Society; it shall provide for the organization of Councilor Districts.

Section 4. The House of Delegates shall meet annually at the time and place of the meeting of this State Society as a whole, as when it meets in General Session, and may hold such number of meetings as the House may determine or its business require, recessing from day to day as may be necessary to complete its business and specifying its own time for the holding of its meetings.

Sec. 5. A Delegate must have been a qualified member of this State Society for at least two years preceding election.

Sec. 6. A Delegate once seated shall remain a Delegate throughout the entire session and for one year there-

after until the next Session of this House of Delegates, and his place shall not be taken by any other Delegate or Alternate, provided that in case of emergency the House of Delegates may seat a duly accredited Alternate from his component County Society. Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved.

Sec. 7. The Secretary of component County Societies shall certify to the Secretary of this State Society the names of Delegates and Alternates who shall represent them at any Annual or Special Session. Each component County Society shall elect Alternate Delegates in equal number to the number of Delegates and designate their seniority.

Sec. 8. A quorum of the House of Delegates shall be constituted by not less than 40 per cent of the accredited Delegates, providing that a majority of such quorum shall not come from any one component County Society.

Sec. 9. The officers of the House of Delegates shall be a Speaker and Vice Speaker. The Secretary of this State Society, elected by The Council, shall be the Secretary of the House of Delegates. The Speaker and Vice Speaker shall be elected by the House of Delegates at the Annual Session. The Speaker of the House of Delegates shall be a member of The Council and of its Executive Committee with right to vote.

Sec. 10 (a) The House of Delegates is the legislative body of this State Society, and shall have authority to adopt and institute such methods and measures as it may deem most sufficient for the upbuilding and establishing of the interest of the profession in Michigan. (b) It shall concern itself with and advise as to the interests of the profession and of the public in those matters of legislation pertaining to medical education, medical registration, medical laws and public health. (c) It shall be active in the education of the public in regard to medical research and scientific medicine.

(d) Delegates and Alternate Delegates to the American Medical Association shall be elected in accordance with the regulations of that parent organization and as hereinafter provided. They shall hold office for two years.

At each annual election, candidates for Delegates to the House of Delegates of the American Medical Association shall be nominated in number equal to or greater than the number to be elected that year. Election shall be by ballot. The required number of high candidates shall be declared elected.

In case of a tie vote of high candidates, the winner, or winners, shall be decided by drawing lots; supervised by the Speaker of the House of Delegates; provided, however, that any candidate thus tied shall have the right to a decision by ballot if he requests same.

The number of Alternate Delegates shall equal the number of Delegates. They shall be elected in exactly the same manner after all Delegates have been elected.

Alternate Delegates shall have relative seniority according to the respective number of votes received by them, and such seniority shall be designated at the time of election. Alternate Delegates serving their second year shall hold seniority over those Alternate Delegates serving their first year in office; provided, however, that re-election as Alternate Delegate shall carry with it no additional seniority.

Any vacancies caused by failure or inability of any Delegates to attend shall be assigned to Alternate Delegates in order of their seniority as defined in this section.

(e) It shall have the authority to appoint committees, standing or special, from among its members or other doctors not members of the House of Delegates. Such committees will report to the House of Delegates and their members may participate in the debate upon their



committees' report, regardless of membership in the House of Delegates.

(f) It shall approve each action and resolution in the name of this State Society before the same shall become effective. Provided, that in the interim, in the presence of necessity for prompt action, The Council or the Executive Committee of The Council is empowered to act on behalf of this State Society.

(g) It shall elect the Councilors upon the nomination of the Delegates of the Councilor District whose Councilor's term expires, as hereinafter provided.

(h) The House of Delegates shall provide for the division of the scientific work of the Society into appropriate sections adding new and discontinuing old sections. It shall prescribe the rules governing the meetings of these sections and the election of officers.

(i) It shall present a summary of its proceedings at a General Meeting of the Society and publish its minutes in THE JOURNAL of the Michigan State Medical Society.

(j) It may have the following reference committees, together with Tellers and Sergeant-at-Arms, appointed by the Speaker of the House and approved by the House of Delegates, and such other reference committees as may be necessary from time to time.

1. Credentials.
2. Council of Reports.
3. Reports of Officers.
4. Reports of Standing Committees.
5. Reports of Special Committees.
6. Constitution and By-Laws.
7. Resolutions.
8. Rules and Order of Business.
9. Legislation and Public Relations.
10. Hygiene and Public Health.
11. Executive Session.
12. Medical Service and Prepayment Insurance.
13. Emergency Medical Service.
14. Miscellaneous Business:  
Tellers  
Sergeant-at-Arms

(k) No new business shall be introduced in the last meeting of the House of Delegates without unanimous consent of the Delegates except when presented by The Council. All new business so presented shall require three-fourths affirmative vote for adoption.

(l) Election of officers shall be held at the last meeting of the House of Delegates at the Annual Session. Each nomination shall be made from the floor of the House. In the event of having only one nominee, the candidate may be elected by a viva voce vote. Members elected to office shall take office with the induction of the Incoming President, as provided in this Constitution and By-Laws.

(m) Each resolution introduced into the House of Delegates shall be in writing and presented in triplicate to the Secretary, immediately after the Delegate has read the same, and shall be referred to the proper reference committee by the Speaker before action thereon is taken.

(n) Robert's Rules of Order, when not in conflict with this Constitution and By-Laws, shall govern the parliamentary proceedings of the House of Delegates.

## CHAPTER 9—THE COUNCIL

Section 1. The Council is the Executive Body of this State Society. It shall determine its own time and place of meeting. It shall hold an Annual Meeting at which time it shall elect to serve for one year its Chairman, Vice Chairman, a Secretary, Chairman of the Finance Committee, Chairman of the County Societies Committee, and Chairman of the Publication Committee; these with the President, the President-Elect, and the Speaker of the House of Delegates shall constitute the Executive Committee of The Council.

Sec. 2. Each Councilor shall be the organizer, peace maker and censor for his District. He shall visit each component County Society in his District at least once a year and keep in touch with the activities of the societies constituting his District. He shall make such reports as the Chairman of The Council shall request concerning the condition of the profession in that District.

Sec. 3. Upon written complaint of at least half of the Delegates of the Councilor District involved, presented to the House of Delegates, in regular or special session stating that the Councilor of said District has been remiss in his duties as prescribed above, and has been notified a month previously of this proposed action, the Speaker of the House shall bring the matter before the House of Delegates for consideration. On two-thirds' vote of the House of Delegates this office shall be declared vacant and a successor elected.

Sec. 4. It shall make careful inquiry into the condition of the profession in each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such component County Societies as already exist. It shall especially and systematically endeavor to promote friendly intercourse between Doctors of Medicine in the same locality. It shall make every effort to bring each reputable Doctor of Medicine in the State under the Society's influence.

Sec. 5. It shall, upon application, provide and issue charters to component County Societies organized in conformity with this Constitution and By-Laws. It shall revoke such charters when deemed necessary, as provided in this Constitution and By-Laws.

Sec. 6. The Council shall direct and control the publication of THE JOURNAL of the Michigan State Medical Society.

Sec. 7. The Council shall elect an Editor of THE JOURNAL of the Michigan State Medical Society, and a Treasurer at its annual meeting. They shall take office immediately and serve for a term of one year, or until their successors are elected and have taken office.

Sec. 8. The funds of the Society shall be disbursed only by order or action of The Council. This authority may be delegated to the Executive Committee of The Council by The Council.

Section 9. Funds of the Society for investment shall be delivered to the custody of the Treasurer by the Secretary.

Sec. 10. The Council shall provide such headquarters for The Society as may be required to conduct its business properly.

Sec. 11. The Council shall render an Annual Report to the House of Delegates.

Section 12. The following County Societies shall constitute the Councilor Districts of the State.

*First District*—Wayne

*Second District*—Eaton, Hillsdale, Ingham, Jackson

*Third District*—Branch, Calhoun, St. Joseph

*Fourth District*—Allegan, Berrien, Cass, Kalamazoo, Van Buren

*Fifth District*—Barry, Ionia-Montcalm, Kent, Ottawa

*Sixth District*—Clinton, Genesee, Shiawassee

*Seventh District*—Huron, Sanilac, Lapeer, St. Clair

*Eighth District*—Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola

*Ninth District*—Grand Traverse-Leclanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet, combined), Wexford-Missaukee.

*Tenth District*—Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties (Otsego, Mountmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined).

*Eleventh District*—Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

*Twelfth District*—Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger.



*Thirteenth District*—Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon.  
*Fourteenth District*—Lenawee, Livingston, Monroe, Wash-tonaw  
*Fifteenth District*—Macomb, Oakland  
*Sixteenth District*—Wayne

## CHAPTER 10—STANDING COMMITTEES

Section 1. The following Standing Committees shall be appointed by the President with the advice of The Council:

- (a) Committee on Postgraduate Medical Education
- (b) Committee on Preventive Medicine and its Sub-Committees
- (c) Committee on Distribution of Medical Care
- (d) Committee on Public Relations and its Sub-Committees
- (e) Committee on Ethics
- (f) Committee on Legislation

Sec. 2. The Committee on Postgraduate Medical Education shall consist of a Chairman and twelve members, four of whom shall be appointed each year to serve for a three-year term.

The duty of this committee shall be to supervise for the Michigan State Medical Society all postgraduate medical training in the State and, with the approval of the Executive Committee of The Council, make any changes, additions or discontinuances of present programs and initiate such new programs as they deem advisable.

Sec. 3. Committee on Preventive Medicine shall consist of its Chairman, the State Health Commissioner, and Chairmen of the following committees:

- Committee on Rheumatic Fever Control
- Committee on Cancer Control
- Committee on Maternal Health
- Committee on Venereal Disease Control
- Committee on Tuberculosis Control
- Committee on Industrial Health
- Committee on Mental Hygiene
- Committee on Child Welfare
- Committee on Geriatrics.
- Committee on Postgraduate Medical Education

Such other committees as may, from time to time, be appointed to study and develop programs dealing with specific diseases.

The duty of this committee shall be to collect, analyze and distribute information on preventive medicine, and to advise medical and other groups or individuals concerning problems in preventive medicine and public health.

Sec. 4. The Committee on the Distribution of Medical Care shall consist of five members appointed by the President.

This Committee shall collect, analyze and distribute information, and advise medical and other groups or individuals concerning Medical Economic problems in Michigan. It may appoint sub-committees and seek information and co-operation whenever such action, in its judgment, is necessary to Public Welfare. It shall act as a central clearing house for the activities of Committees on the Distribution of Medical Care of the various component County Societies throughout the State.

Sec. 5. The Committee on Public Relations shall be appointed by the President. It shall be the duty of this committee: (a) to integrate and publicize all approved plans and projects emanating from The Council, the Executive Committee, and other Standing and Special Committees of the Michigan State Medical Society; (b) to consider all plans and projects, and make suggestions and recommendations for improving or changing such plans for integration and publicizing; (c) to develop further plans for better physician-public contacts. The President shall appoint such Sub-Committees of this

committee as are required in the execution of its work.

Sec. 6. The Committee on Ethics shall consist of eight members appointed by the President with the advice of The Council, each member to serve for a four-year term, so staggered that two members are selected annually. In case a vacancy occurs before the expiration of a member's term, the President shall appoint a successor to serve the unexpired portion of the term.

The Committee shall render advisory opinions on questions of ethics submitted to it by The Council.

On request of The Council it shall conduct an investigation, under rules approved by The Council, concerning the ethical conduct of a designated member of this State Society and report its findings to The Council in accordance with these By-Laws.

Sec. 7. The Committee on Legislation shall consist of a Chairman, the President-Elect of this State Medical Society and the Chairman of The Council of this State Medical Society and members to be appointed by the President.

The Committee on Legislation shall utilize every organized influence of the profession for the promoting of such legislation as will be for the best interests of the public's health and that of scientific medicine. It shall work under the direction of the House of Delegates or The Council when the House of Delegates is not in session. No bill or proposed law or amendment shall be delivered to any member of The Michigan State Legislature for introduction in the name of this State Society or by any of its committees until such proposed legislations shall have been endorsed and approved by The Council. (Provided this latter authority may be delegated to the Executive Committee of The Council by The Council.)

It shall submit an annual report with recommendations to The House of Delegates.

## CHAPTER 11—OFFICERS

Section 1. Officers shall be installed at the General Meeting at which the reports of the House of Delegates are received. They shall serve until the next Annual Session, provided that Councilors shall serve for five years, and provided further that not more than four Councilor terms shall expire normally at any Annual Session; provided further that Delegates to the American Medical Association shall serve for two years; provided further that not more than three Delegates to the American Medical Association shall be elected in any one year.

Sec. 2. Officers shall serve until their successors are elected and inducted into office.

Sec. 3. At the Annual Session of this State Society, next following his election, The President-Elect shall be installed into and assume the office of the President. He shall serve until his successor takes office. The assumption of office shall occur in a General Session of the Society as a whole, at which the report of the House of Delegates is received. If no General Meeting is held at the Annual Session, the induction into office of the Incoming President and the newly elected officers and representative officials shall be in the last meeting of the Annual Session of the House of Delegates.

Sec. 4. The President shall preside at the General Meeting of the Society at which the reports of the House of Delegates are received, and shall fill vacancies in office and committees with the advice of The Council, unless otherwise provided for; he shall appoint the members of each committee not otherwise provided for; he shall deliver the President's address; he shall have a voice in the deliberations of the House of Delegates and he shall be an ex-officio member of The Council with the right to vote.

Sec. 5. The President-Elect shall be a member of The Council and the Executive Committee of The Council ex officio, and shall have the right to vote, and shall act for the President in his absence or disability. If the office of President shall become vacant, the President-Elect shall succeed to the presidency. If the office of President shall

again become vacant, The Council, at a Special Session, shall elect a President for the unexpired term.

Sec. 6. The Treasurer shall be the custodian of all the invested funds and the securities of the Society. He shall be accountable through The Council to the Society. The Council shall cause an annual audit of his accounts to be made. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society.

Sec. 7. The Secretary shall be an active member of the Michigan State Medical Society and shall be paid a salary to be determined by The Council. He shall be the recording officer of the House of Delegates, The Council, Scientific Assembly and Annual Session. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society. He shall also discharge the following duties:

(a) Collect all annual membership dues, assessments, donations and such other monies as may be due to the Society; keep membership records and issue membership certificates.

(b) He shall make all required reports to the American Medical Association. He shall make a report of the proceedings of the House of Delegates to the Annual Meeting of this State Society.

(c) He shall deposit all funds received in an approved depository and disburse them upon order of The Council. The Council may delegate the authority for disbursing funds to the Executive Committee of The Council. The Council shall cause an annual audit of his accounts by a certified public accountant. He shall render a report to The Council reviewing the Society's activities and imparting recommendations for the advancement of the Society's interests at each meeting of The Council.

(d) Under the direction of The Council and with the advice of the Editor, he shall be the business manager of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

(e) He shall superintend all arrangements for the holding of each meeting in compliance with the Constitution and By-Laws and instructions of The Council or its Executive Committee.

(f) He shall send out all official notices of meetings, committee appointments, certificates of election to office and special duties of committees.

(g) He shall receive and transmit to the House of Delegates and to The Council each committee and officer's annual report.

(h) He shall institute and correlate each new activity under the supervision of The Council or its Executive Committee, and shall work on component County Society integration and furnish information to the public concerning health matters as directed by the President and The Council.

Sec. 8. There shall be an Executive Director, not necessarily a Doctor of Medicine or a member of the Michigan State Medical Society, who shall be appointed by The Council at its Annual Meeting and shall be remunerated by a salary which shall be fixed by The Council.

The Secretary shall, with the approval of The Council, assign duties to the Executive Director as he deems advisable.

Sec. 9. The Speaker of the House of Delegates shall preside at sessions of the House of Delegates. He shall, with the approval of the President, appoint all committees created by the House of Delegates, unless otherwise provided, and shall perform such duties as custom and parliamentary usage require. He shall be a member of The Council and of its Executive Committee with the power to vote.

Sec. 10. The Vice Speaker shall assume the Speaker's duties in the Speaker's absence in the House of Delegates and such other times as the House of Delegates or The Council shall determine.

## CHAPTER 12—REFERENDUM

Section 1. At any General or Special Session of this State Society as a whole, as when it meets in General Session, it may by a two-thirds vote order a general referendum upon any question pertinent to the purposes and objects of the Michigan State Medical Society, organized medicine, or health of the public; provided, however, that a quorum at such General or Special Meeting shall consist of 300 members of the Michigan State Medical Society who are in good standing.

Sec. 2. The House of Delegates, by a majority vote may submit any question pertinent to the community and organized medicine to the membership of the Society for its vote, such vote to be taken by County Societies and certified by their secretaries to the State Society Secretary. Two-thirds of the vote cast shall be required to carry the question.

## CHAPTER 13—SEAL

Section 1. The Society shall have a common SEAL. The power to change or renew the seal shall rest with The Council.

## CHAPTER 14—EMERGENCY

Section 1. When prompt speech and action are imperative, authority to speak and act in the name of this State Society is vested in The Council or the Executive Committee of The Council of this State Society.

## CHAPTER 15—DUES

Section 1. The Secretary of each component County Society shall collect and forward the dues and assessments to the Secretary of the Michigan State Medical Society on or before April first of each year.

Sec. 2. Any member in arrears after April 1 of each official year shall stand suspended until his name is properly recorded and his dues and assessments for the current year properly remitted.

Sec. 3. Any component County Society which fails to make the reports required at least thirty days before the Annual Session of this State Society shall be held suspended and none of its members or Delegates shall be permitted to participate in any of the proceedings of the Society or of the House of Delegates.

## CHAPTER 16—ELECTION—COMPONENT COUNTY SOCIETIES

Section 1. At the Annual Meeting of each component County Society or at a designated meeting of which ample notice has been given, each component County Society shall elect Delegates and Alternate Delegates in conformity with the provisions of this Constitution and By-Laws to represent the component County Society in the House of Delegates of this State Society. The Secretary of the component County Society shall immediately send a list of its Delegates and Alternate Delegates to the Secretary of this State Society.

A Delegate, or in his absence, the Alternate Delegate, becomes a member of the House of Delegates when properly registered and seated at the Annual or Special Session following his election by the component County Society.

## CHAPTER 17—DEFINITION OF SESSION AND MEETING

Section 1. A session shall mean all meetings at any one call.

Sec. 2. A meeting shall mean each separate convention at any one session.

## CHAPTER 18—AMENDMENTS

Section 1. These By-Laws may be amended by a majority vote of the Delegates seated, after the proposed amendment is laid on the table for one meeting of the House of Delegates. These By-Laws become effective immediately upon adoption.



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## MPHA ELECTS DR. C. C. SLEMONS

C. C. Slemons, M.D., former Michigan Commissioner of Health, Past President of the Michigan State Council of Health, and health officer of the City of Grand Rapids for twenty-seven years, was named President-Elect of the Michigan Public Health Association at its annual meeting in Grand Rapids, December 2.

Lyman Chamberlain of Charlotte, Eaton County sanitarian, took over his duties as 1948 President, succeeding Mildred Cardwell, R.N., of Lansing.

Other officers elected by the Association are: Vice President, James N. Gasaway, D.D.S., of Lexington; Secretary and Treasurer, Marjorie Delavan, Director, Bureau of Education, Michigan Department of Health; Representative on the Governing Council of the American Public Health Association, David Littlejohn, M.D., Eloise; and directors, George Stucky, M.D., Charlotte; John Pomeroy, Kalamazoo; Marian Murphy, R.N., Ann Arbor; Mary Connelly, Ann Arbor; J. G. Molner, M.D., Detroit, and Georgina Reid, R.N., Eloise.

## CHEST X-RAYS

The Michigan Department of Health has taken its one millionth free chest x-ray in its seven-year-old tuberculosis casefinding survey with traveling x-ray units operated at state expense.

The first 972,808 x-rays made by the units of the Department revealed 8,340 suspect cases of active or inactive tuberculosis which otherwise might not have been found.

Michigan was a pioneer in the use of the small x-ray in a statewide tuberculosis casefinding program. When the Michigan Department of Health obtained its first x-ray unit in October, 1940, it was the first of its kind in the country.

The first unit, a mobile bus-type equipment, x-rayed 8,271 persons in its first year of operation. The five mobile units now operated by the Department x-ray approximately 300,000 persons a year. All the units use small (70 mm.) films.

The small film x-raying is actually a screening process. Follow-up of suspect cases is made through local facilities.

Most recent cost figures of the Michigan Department of Health program shows that 35 cents per film covers the entire cost of operation, including the operation of traveling units, the expenses and salaries of personnel, and the cost of supplies, developing of x-ray films, medical interpretation, and mailing of reports to patients, their family physicians and local health agencies.

Michigan is now reaping the benefit that comes to a state which has pioneered in the tuberculosis field. Tuberculosis, which was seventh in major causes of death in the state from 1940 to 1946, fell to eighth place in 1947 and will be in ninth place in 1948.

Michigan law provides that when a person, through x-ray screening and subsequent medical study, is found

to have active tuberculosis, hospital care is available at state and county expense.

## SECOND ANNUAL CHILDREN'S DENTAL HEALTH DAY

Michigan's second annual Children's Dental Health Day will be held in the Statler Hotel, Detroit, January 31, 1949, with some of the nation's experts in the field speaking on the program.

The Day planned to stimulate better dental services for children and to arouse public interest in children's dental needs will be attended by practicing dentists, dental hygienists, public health and lay people.

## AIDS OCCUPATION FORCES

Sam Bozeman, an Assistant Director of the Bureau of Laboratories, Michigan Department of Health, has been granted a year's leave of absence to help with laboratory work in preventive medicine in occupied Japan. He will be chief of the Laboratory Branch, Public Health and Welfare Section, Preventive Medicine Division, General Headquarters Staff, Supreme Command, Allied Forces, in Tokyo.

## PEDIATRICIAN RESIGNS

Dr. James Beesley, pediatric consultant with the Bureau of Maternal and Child Health, Michigan Department of Health, has resigned to go into private practice in Ohio.

## ELECTRON MICROSCOPE INSTALLED

The new electron microscope is now being installed in the biophysics section of the recently completed media laboratory of the Department.

## MPHA TO MEET IN DETROIT

The 29th annual Michigan Public Health Convention will be held at the Hotel Statler, Detroit, November 9 to 11, 1949.

## MAY SUBSTITUTE SMALLER VIALS

The Department does not always have 20,000 unit vials of diphtheria antitoxin available. When it is out of 20,000 unit vials, twice the number of 10,000 units are substituted.

## INCIDENCE OF COMMUNICABLE DISEASE

Disease	November 1948	November 1947
Diphtheria .....	17	38
Gonorrhea .....	797	825
Lobar pneumonia .....	76	41
Measles .....	802	2162
Meningococcic meningitis .....	7	3
Pertussis .....	105	690
Poliomyelitis .....	81	44
Scarlet fever .....	522	308
Syphilis .....	881	1310
Tuberculosis .....	532	431
Typhoid fever .....	5	9
Undulant fever .....	16	26
Smallpox .....	0	0

## BRONCHIAL ASTHMA

"Aminophyllin has in recent years taken a definite place in the armamentarium of asthmatic medication. Physiologically it acts by relaxing the bronchial muscles. It is also extremely valuable in relieving patients of an adrenalin fastness and is less contraindicated in cases with cardiac disorders or hypertension."<sup>1</sup>

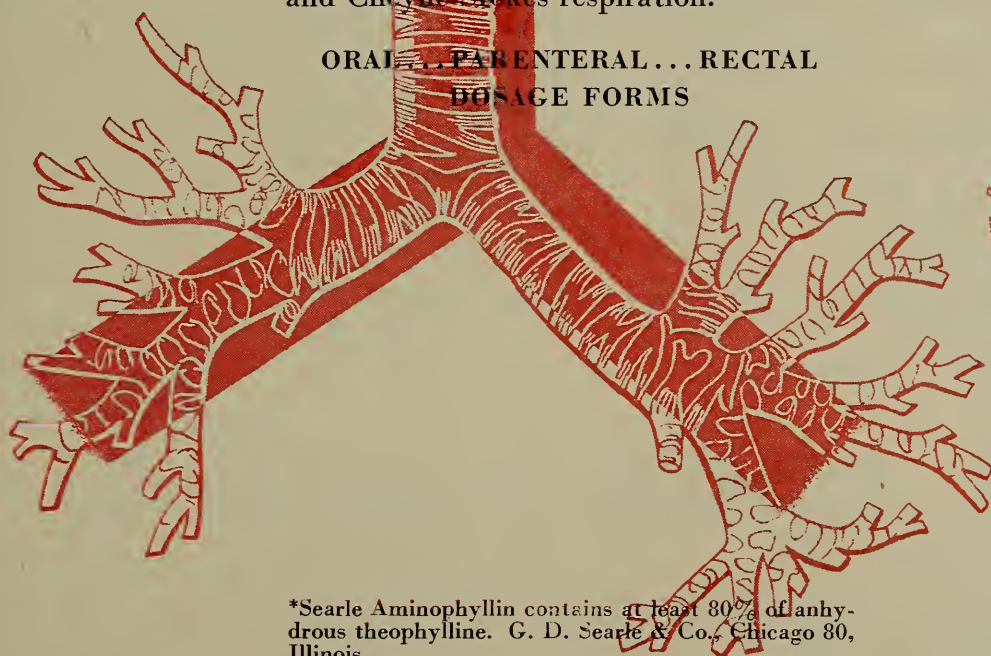
By relaxing the bronchial musculature, improving ventilation, increasing vital capacity and promptly reducing both intrathecal and venous pressures,

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exerts a favorable influence on the rate and volume of respiration in bronchial asthma as well as in paroxysmal dyspnea and Cheyne-Stokes respiration.

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## SEARLE RESEARCH IN THE SERVICE OF MEDICINE

1. Mountain, G. E.: Bronchial Asthma, J. Iowa M. Soc. 35:324 (Aug.) 1945.





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## In Memoriam

STARR K. CHURCH, M.D., of Marshall, Michigan, was born in Marshall in 1867, and graduated from the University of Michigan Medical School in 1892. Dr. Church had practiced in Marshall for over fifty years, was a member of the Calhoun County Medical Society, the American Medical Association, and an emeritus member of the Michigan State Medical Society. He died on November 19, 1948, in Marshall, Michigan, at the age of eighty-one years.

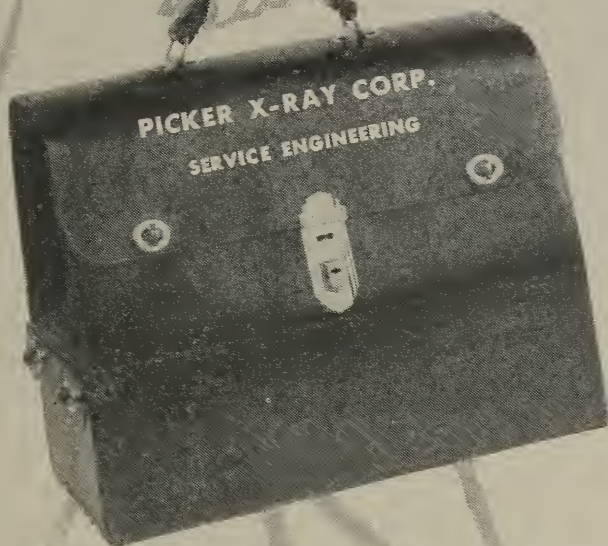
THOMAS YUE HO, M.D., of St. Johns, Michigan, was born November 11, 1897 in Hoihow, Hainan, China. He attended an Anglo-Chinese School in Singapore prior to coming to the United States where he attended Southwestern College, Winfield, Kansas, and graduated from Northwestern University School of Medicine in 1922. Dr. Ho had been secretary of the Clinton County Medical Society for over twenty-six years, and was also a member of the American Medical Association, the Michigan State Medical Society, a Fellow in the American College of Physical Therapy, and a member of the Society of Anesthesiology. Dr. Ho died on November 19, 1948, in St. Johns, Michigan, at the age of fifty-one years.

OREN GUY JOHNSON, M.D., of Mayville, Michigan, was born July 30, 1872, in Rich Township, Lapeer County, Michigan. He graduated from the Wayne University College of Medicine in 1905. Dr. Johnson was a captain in the Medical Corps during World War I, served two terms in the Michigan State Senate and was president of the Village of Mayville for several years. Dr. Johnson was a past president of the Tuscola County Medical Society, a member of the American Medical Association and the Michigan State Medical Society. He passed on May 19, 1948, in Mayville, Michigan, at the age of seventy-five.

HEMAN B. KIEHLE, M.D., Lapeer, Michigan, was born April 10, 1853, in Scotsburg, New York. He attended Buffalo Medical College and was a graduate of the College of Physicians and Surgeons in Keokuk, Iowa, in 1887. He was former vice president and organizer of the medical society embracing Ogemaw, Montmorency, Crawford, Oscoda, Roscommon and Otsego Counties. He was a former member of Lapeer County Medical Society, the American Medical Association and the Michigan State Medical Society. Dr. Kiehle began practice at Beaver Lake, Michigan, and retired from active practice in 1938. Dr. Kiehle died March 15, 1948, in Lapeer, Michigan, at the age of ninety-four.

MARK S. KNAPP, M.D., of Fenton, Michigan, was born in 1872 and graduated from the University of Michigan Medical School in 1898. Dr. Knapp was president of the Genesee County Medical Society in 1914,

*(Continued on Page 96)*

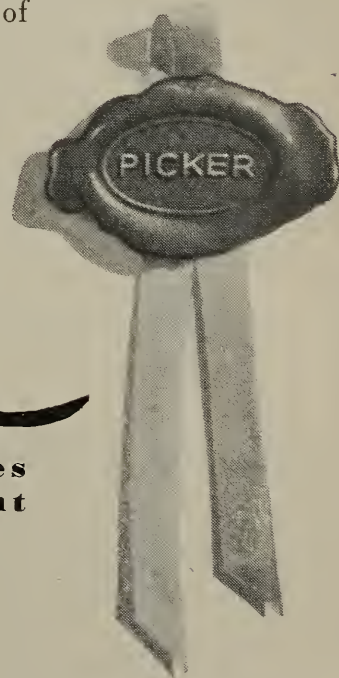


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(Continued from Page 94)

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executive secretary of the Rackham Fund, Ann Arbor, Michigan, from 1934 to July 1936; a former member of the Trudeau Society and a Fellow of the American College of Physicians. He limited his practice to internal medicine and was a retired member of the American Medical Association and the Michigan State Medical Society. He passed on November 11, 1948, in Fenton, Michigan, at the age of seventy-six years.

GEORGE DONALD LIVINGSTON, M.D., of Detroit, Michigan, was born in 1912 and graduated from the Wayne University Medical School in 1938. He served three and a half years in the Army Medical Corps during World War II, was a member of the Wayne County Medical Society, the American Medical Association, and the Michigan State Medical Society. Dr. Livingston died November 14, 1948, in Detroit, Michigan, at the age of thirty-seven years.

GEORGE M. LIVINGSTON, M.D., of Albion, Michigan, was born in the year 1867 in Toronto, Canada, and graduated from the University of Michigan Medical School in 1898. He studied in Vienna, Berlin, Rome, and Paris before beginning his medical practice. Dr. Livingston had served for twenty years on the staff of the Highland Park General Hospital, and was an honor member of the Wayne County Medical Society, a retired member of the American Medical Association and the Michigan State Medical Society. He died on October 27, 1948 in Albion, Michigan, at the age of eighty years.

WILLIAM DE VOE LYMAN, M.D., of Grand Rapids, Michigan, was born in Kansas in 1876 and graduated from the Grand Rapids Medical College in 1906. Dr. Lyman was a Major in the Army Medical Corps during World War I. He was a member of the Kent County Medical Society, the American Medical Association, and a life member of the Michigan State Medical Society. Dr. Lyman died November 21, 1948 in Grand Rapids, Michigan, at the age of seventy-two years.

FRALEY McMILLAN, Charlevoix, Michigan, was born December 4, 1882, in Bronson, Michigan. He graduated from the University of Michigan Medical School in 1906 and had practiced in Charlevoix since 1919. Dr. McMillan was a past president of the Northern Michigan Medical Society, a member of the Michigan State Medical Society and the American Medical Association. He was very active in public affairs and had been county coroner for twenty years, as well as president of the Charlevoix Hospital Board of Directors. Dr. McMillan passed on, July 29, 1948, in Charlevoix, Michigan, at the age of sixty-six.

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MRS. W. L. DIXON

THE WOMAN'S Auxiliary begins another year of activity, with unlimited opportunities for service to the Medical Profession. Each new president, I am sure, is overwhelmed by the task that lies before her. I assure you I am no exception. But to offset these fears is the knowledge that the 1,700 members of our Auxiliary are ready and willing to share my problems. They are your

problems as well as mine, but by planning together, working together, and if need be fighting together, we can justify the confidence our State Medical Society has placed in us.

To help me plan and guide the state activities this coming year are the following loyal and conscientious officers and committees:

### Officers

President-Elect and Organization Chairman—Mrs. D. R. Wright, Flint  
First Vice President—Mrs. Oscar Stryker, St. Clair Shores  
Second Vice President and Public Relations Chairman—Mrs. Robert Breakey, Lansing  
Recording Secretary—Mrs. Walter Stinson, Bay City  
Corresponding Secretary—Mrs. Henry P. Kooistra, Grand Rapids  
Treasurer—Mrs. H. H. Gay, Midland

### District Directors

#### Districts

1-7-15 Mrs. Milton Darling, Detroit  
2-14 Mrs. A. F. Milford, Ypsilanti  
3-4 Mrs. E. Gifford Upjohn, Kalamazoo  
5-11 Mrs. Fred C. Brace, Grand Rapids  
6-8 Mrs. Martin Bruton, Saginaw  
9-10 Mrs. A. L. Ziliak, Bay City  
12-13 Mrs. T. P. Wickliffe, Calumet

### Committee Chairmen

Archives—Mrs. Floyd Gibbs, Grand Rapids  
Bulletin—Mrs. J. G. Zimmerman, Traverse City  
Finance—Mrs. R. H. Alter, Jackson, Mich.  
Historian—Mrs. William J. Butler, Grand Rapids  
Hygeia—Mrs. D. M. Kane, Sturgis  
Legislation—Mrs. Keith Bennett, Kalamazoo  
Nominating—Mrs. T. Grover Amos, Detroit  
Organization—Mrs. Don R. Wright, Flint  
Parliamentarian—Mrs. Elmer Whitney, Detroit  
Press—Mrs. Hira Branch, Flint  
Program—Mrs. Clarence Clippert, Grayling  
Public Relations—Mrs. Robert Breakey, Lansing  
Revision—Mrs. Frederick Buesser, Detroit  
T. B. Speaking Project—Mrs. Leonard Folkers, East Lansing  
Voluntary Medical Care Planning—Mrs. Geo. Landy, Cadillac

### Advisory Committee

C. Allen Payne, M.D., Grand Rapids, Chairman; T. G. Amos, M.D., Detroit; Alfred LaBine, M.D., Houghton; C. W. Oakes, M.D., Harbor Beach; Homer H. Stryker, M.D., Kalamazoo.

I hope to have a news letter to send to the County Presidents the middle of this month, in which I shall explain our aims and projects for the coming year. In

(Continued on Page 100)

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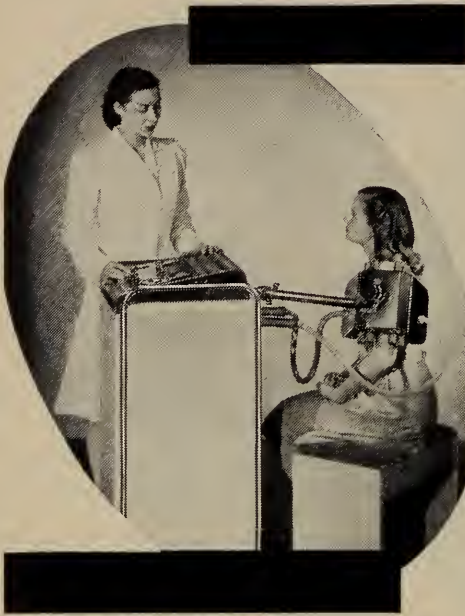
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\*Wakim, K. G.; Gersten, J. W.; Herrick, J. F.; Elkins, E. C.; Krusen, F. H. and Porter, A. N.: The Effects of Diathermy on the Flow of Blood in the Extremities, *Arch. Physical Medicine*, 29:583-93 (Sept.) 1948.

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## WOMAN'S AUXILIARY

(Continued from Page 98)

organization there is strength. The hundreds of members of the State Auxiliary can be a mighty force, a great power when its energy is harnessed into unified pieces of work. Find where you are most needed, where you can do the most good, then follow through. If we do this, we shall be doing our full share.

My sincere wishes to each of you for a successful and happy Auxiliary year.

(Mrs. W. L.) BESSIE P. DIXON

*President, MSMS Auxiliary*

## Communication

Mr. William J. Burns, Executive Secretary  
Michigan State Medical Society  
Lansing 8, Michigan

Dear Mr. Burns:

At the behest of a member of the Michigan State Medical Society, you have asked me to express an opinion as to whether a physician may, in his income tax return, deduct as a business expense the cost of traveling and attending a postgraduate course.

Expenses incurred by doctors in taking postgraduate courses are not deductible, O. D. 984, C. B. Dec. 1921, p. 171.

On the other hand, expenses incurred in attending conventions of professional societies have consistently been held deductible in the income tax returns of doctors.

Thus, it would seem that if a doctor attends a meeting or convention of one of his professional societies, he may well show the expense as follows: "Convention expenses, attendance on meeting of Michigan State Medical Society at Detroit." And this would seem proper even though during the course of the convention a postgraduate lecture or demonstration were given.

I trust the foregoing will answer the inquiry made of you.

Very truly yours,

J. JOSEPH HERBERT,

*General Counsel*

*Michigan State Medical Society*

October 16, 1948

\* \* \*

One kind of horse is a well-known animal, but in a steel mill a *horse* is a chunk of iron which solidifies in the bottom of a blast furnace.

\* \* \*

An early *match* was made with wood sticks coated with a mixture of potassium chlorate and sugar and tipped with sulfur; it was ignited by sticking it into shredded asbestos impregnated with concentrated sulfuric acid.—*Science News Letter*, November 10, 1948.



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# NEWS MEDICAL

All seven physician-members of the U. S. House of Representatives were re-elected.

\* \* \*

Renew your Federal and State narcotic licenses on or before July 1.

\* \* \*

"God Grants Liberty only to those that love it, and are always ready to guard and defend it."—DANIEL WEBSTER

\* \* \*

L. J. Gariepy, M.D., Detroit, was recently elected a member of the Pan-American Medical Association.

\* \* \*

The Wayne County Medical Society will be 100 years old in May, 1949. A commendatory celebration of the WCMS Centennial is being planned.

\* \* \*

Marion S. DeWeese, M.D., Ann Arbor, is the author of an original article "Melanoblastoma" which appeared in JAMA of December 4, 1948.

\* \* \*

Have you noticed that apparently very few people go to a doctor when they have a cold? They seem to prefer the theater, movies, crowded busses or subway cars.—Lansing Rotarygram.

\* \* \*

The West Side Medical Society will hold its 16th Annual Clinic in the Auditorium of Wayne County General Hospital, Eloise, on Wednesday, May 4, 1949, from 10:00 a.m. to 4:00 p.m.

\* \* \*

Reed M. Nesbit, M.D., and A. Waite Bohne, M.D., of Ann Arbor, are authors of an original article "Urinary Tuberculosis" which appeared in JAMA of November 27, Page 937.

\* \* \*

Milton R. Weed, M.D., Donald F. Purvis, M.D., and Robert D. Warnke, M.D., Detroit, are the authors of an original article "d-Tubocurarine for Control of Spasm in Tetanus" which appeared in JAMA of December 11, 1948.

\* \* \*

The Washtenaw County Medical Society will hold a unique party on February 19, 1949, designed to entertain the Woman's Auxiliary to the County Medical Society. The affair will be a dinner dance and bingo party to be held at the Washtenaw Country Club.

\* \* \*

The International and Fourth American Congress on Obstetrics and Gynecology will be held in New York City on May 14-19, 1950. For additional information, write the American Committee on Maternal Welfare, Inc., 24 West Ohio St., Chicago 10, Illinois.

## PERILOUS HOSPITAL FINANCING AT A GLANCE

	1945	1946	1947	Two-year rise
Total expenditures .....	\$8.95	\$10.04	\$11.78	\$2.83 or 31%
Total income .....	9.51	10.48	12.05	2.54 or 26%
Patient income .....	7.95	8.76	10.70	2.75 or 34%
Payroll .....	4.49	5.11	6.30	1.81 or 40%
Per patient day figures (American Hospital Directory—1948) for short term, voluntary, nonprofit hospitals.				

\* \* \*

"What have we accomplished in the three postwar years now completed?" was answered in *The Bulletin of the Kalamazoo Academy of Medicine* by the retiring Editor-Secretary, Don Marshall, M.D., who listed in brief the actions of the Kalamazoo Academy of Medicine in 1946, in 1947, and in 1948.

\* \* \*

The Presidents of the American, American Protestant, and Catholic Hospital Associations met in the office of FSA Administrator Ewing on December 16 to question him about his health insurance campaign and to ask him various questions—some of which may have been very sensitive!

\* \* \*

J. S. DeTar, M.D., Milan, Speaker of the MSMS House of Delegates, has appointed the following Press Relations Committee for the 1949 MSMS Annual Session in Grand Rapids: Ralph A. Johnson, M.D., Detroit, Chairman, Robert H. Baker, M.D., Pontiac, H. F. Dibble, M.D., Detroit, and L. Fernald Foster, M.D., Bay City.

\* \* \*

Michigan Medical Service will hold the annual meeting of its members on Tuesday, September 20, 1949, at 2:00 p.m. in the Grand Ballroom of the Pantlind Hotel, Grand Rapids. The meeting will be preceded by the usual MMS luncheon, in the Furniture Club of the Pantlind Hotel at 1:00 p.m.

\* \* \*

Grover C. Penberthy, M.D., and Clifford D. Benson, M.D., Detroit, are authors of two original articles: "The Complications of Meckel's Diverticulum in Infants and Children" which appeared in *Surgical Clinics of North America*, October, 1948; and "Congenital Duodenal Obstruction (Intrinsic Obstruction)" which appeared in *Archives of Surgery* for January, 1948.

\* \* \*

The National Gastroenterological Association announces its annual cash prize Award Contest for 1949. One hundred dollars and a Certificate of Merit will be given for the best unpublished contribution on gastroenterology or allied subjects. Entries must be received no later than April 1, 1949, and may be addressed to the Association at 1819 Broadway, New York 23, New York.

(Continued on Page 104)

# *Fifth* **CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE**

**Palmer House, Chicago, Illinois**

**March 1, 2, 3, 4, 1949**

A scientific program planned to bring information concerning newer developments in all fields of medicine and presented by these outstanding speakers:

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W. A. Altemeier  
Walter C. Alvarez  
W. L. Benedict  
M. A. Blankenhorn  
Walter P. Blount  
Barney Brooks  
Paul C. Bucy  
J. J. Callahan  
Archibald D. Campbell  
John L. Emmett

Everett I. Evans  
Ray Farquharson  
Edmund F. Foley  
A. C. Furstenberg  
John W. Harris  
Charles B. Huggins  
Robert L. Jackson  
T. E. Jones  
Robert W. Keeton  
George M. Lewis  
Louis R. Limarzi  
Ovid Meyer

James L. Poppen  
Willis J. Potts  
Leo G. Rigler  
Arthur A. Schaefer  
Wendell G. Scott  
Roscoe L. Sensenich  
LeRoy H. Sloan  
Charles T. Stone  
William D. Stroud  
Harry M. Weber  
Henry W. Woltman

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(Continued from Page 102)

*The House of Delegates* of the Michigan State Medical Society will meet in 1949 at the Pantlind Hotel, Grand Rapids, on Monday, Tuesday, September 19-20, 1949. The Monday meetings will be held at 10:00 a.m. and 8:00 p.m.; the Tuesday meetings at 9:00 a.m. and 8:00 p.m. The Tuesday morning meeting will be preceded by a Delegates' Breakfast.

\* \* \*

*Civilian Medical Consultants in Far East.*—In line with the Surgeon General's policy of making the latest in research and technical information available to Army medical officers throughout the world, a medical conference was held October 20, 1948 in Tokyo. Among the subjects discussed was "Diagnosis of Pathologic Personalities," R. W. Waggoner, M.D., Professor of Psychiatry, University of Michigan.

\* \* \*

*Physical Medicine.*—The monthly clinic at Bay City General Hospital on December 1, 1948, was conducted by the Department of Physical Medicine of Grace Hospital. Participating were Miss Barbara Jewett, O.T., Miss Sophia Radlow, R.P.T., and M. K. Newman, M.D., Physiatriest. Dr. Newman also addressed the monthly meeting of the Bay City Medical Society. The subject was "Physical Medicine in Peripheral Arterial Disease."

\* \* \*

*The second annual postgraduate lectures* of the American Academy of General Practice of Wayne County were held in the Rackham Memorial Building, Detroit, on November 10-11, 1948. The attendance was increased over that of 1947—a total of 478. Eighteen lecturers brought the latest in scientific medicine to the registrants, all of whom expressed appreciation for the two-day postgraduate course of the AAGP of Wayne County.

\* \* \*

*S. S. Fajans, M.D.*, Ann Arbor, has been granted a research fellowship by the American College of Physicians to enable him to undertake studies with Jerome W. Conn, M.D., Ann Arbor, in the Metabolism Research Unit and the Endocrinology and Metabolism Clinic of the University Hospital, to determine the physiological mechanisms capable of either stimulating or depressing the Islets of Langerhans.

\* \* \*

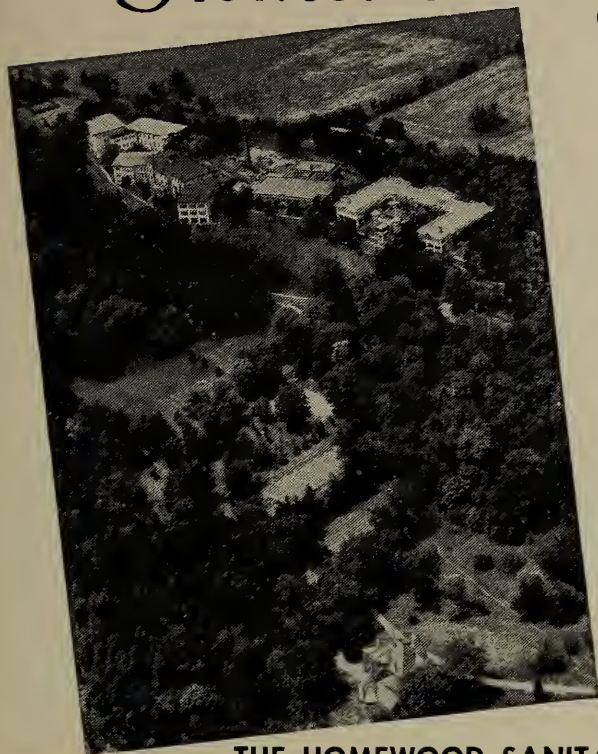
*Orchid for MSMS Annual Session* from Alexander M. Campbell, M.D., Lansing: "I think the recent Annual Session of the Michigan State Medical Society was one of the finest I have ever attended. It was well balanced, and the majority of the speakers whom I heard were "top flight." I was particularly pleased with the program on obstetrics and gynecology. I hope you will be able to continue with this fine work for many years."

\* \* \*

*The first International Congress on Rheumatic Diseases* ever held in the United States will take place at the Waldorf Astoria Hotel, New York, May 30 to June 3, 1948, inclusive. Host will be the American Rheumatism Association in co-operation with the New York Rheumatism Association. For program and additional information, write International Congress on Rheumatic Diseases, 2020 East 93rd Street, Cleveland 6, Ohio.

(Continued on Page 106)

# Homewood Sanitarium



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(Continued from Page 104)

**Socialized Medicine.**—The American Legion in convention assembled in Miami, Florida, October 18, 19, 20 and 21, Resolved that "We are still unalterably opposed to all efforts and movements to force socialized medicine upon the American People." This resolution follows numerous "whereas's," one of which was "Whereas the Communists have proclaimed 'Socialized Medicine' is the keystone to the arch of the socialized state."

\* \* \*

**Secretary L. Fernald Foster, M.D.,** Bay City, spoke to the Kalamazoo Academy of Medicine, November 16, on "Better Public Relations by the Individual Doctor of Medicine"; he also addressed the combined meeting of the Women's Clubs of Big Rapids, December 6, on "Our National Health Program." He will address the Calhoun Medical Society, Battle Creek, February 1, 1949, on "The Individual Physician's Responsibility for Good Public Relations."

\* \* \*

**The Ionia-Montcalm County Medical Society's** meeting of November 23 at Ionia constituted a Silver Jubilee for its retiring Secretary John J. McCann, M.D., of Ionia. The meeting was held at the home of Dr. McCann who was eulogized by his confreres on his twenty-five years' service to his County Medical Society. Guest speakers before the Society were J. S. DeTar, M.D., Milan, Speaker of MSMS House of Delegates; L. Fernald Foster, M.D., Bay City, MSMS Secretary; and Hugh W. Breneman, Lansing, MSMS Public Relations Counsel.

\* \* \*

"**Cancer Research,**" a scientific journal reporting research directed toward the understanding and conquest

of cancer, will be published at the University of Chicago, beginning January, 1949. It will be the official organ of the American Association for Cancer Research and will be edited by Paul E. Steiner, M.D., Professor of Pathology, University of Chicago. The journal is written for the medical profession and will be issued monthly. Subscription rate \$7.00 per annum. Inquiries may be addressed to University of Chicago Press, 5750 Ellis Avenue, Chicago, Illinois.

\* \* \*

**The Conference of Presidents** and other Officers of State Medical Associations will be held in the Rose Room of the Traymore Hotel, Atlantic City, on Sunday, June 5, 1949. On the program for discussion will be the new British Health system, progress of state compulsory cash sickness compensation programs in the United States, the 1949 WMD proposal, and other live issues of the day. All members of the Michigan State Medical Society are cordially invited to the Conference of Presidents. Andrew S. Brunk, M.D., Detroit, is a member of the Executive Committee.

\* \* \*

**The Mount Carmel Mercy Hospital Alumni Clinic Day** will be held Wednesday, January 26, 1949, in the Hospital Auditorium. Featured will be Mims Gage, M.D., of New Orleans, Priscilla White, M.D., Boston, James R. Jaeger, M.D., Philadelphia, Maxwell M. Wintrobe, M.D., Salt Lake City, T. C. Davison, M.D., and A. H. Letten, M.D., Atlanta. All members of the Michigan State Medical Society are cordially invited to attend the

(Continued on Page 108)

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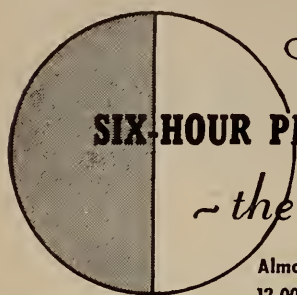


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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting February 7, March 7.

Surgical Anatomy and Clinical Surgery, two weeks, starting February 21, March 21.

Surgery of Colon and Rectum, one week, starting March 7, April 11.

Surgical Pathology every two weeks.

**GYNECOLOGY**—Intensive Course, two weeks, starting February 21, March 21.

Vaginal Approach to Pelvic Surgery, one week, starting February 14.

**OBSTETRICS**—Intensive Course, two weeks, starting March 7.

**MEDICINE**—Intensive Course, two weeks, starting April 4.

Personal Course in Gastroscopy, two weeks, starting March 7.

**PEDIATRICS**—Intensive Course, four weeks, starting April 4.

**DERMATOLOGY**—Formal Course, two weeks, starting April 18.

Clinical Course every two weeks.

**CYSTOSCOPY**—Ten-Day Practical Course every two weeks.

**ROENTGENOLOGY**—Lecture and Diagnostic Course, two weeks, starting the first Monday of every month.

Clinical Course starting third Monday of every month.

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(Continued from Page 106)

Clinic, the complimentary noonday luncheon at the Hospital, as well as the banquet at the Statler Hotel the evening of January 26.

\* \* \*

*Public Relations Counsel H. W. Brenneman* addressed the Woman's Auxiliary of the Kent County Medical Society, Grand Rapids, on November 9. His subject was "How the Woman's Auxiliary Can Do a Big Job in Public Relations"; he also spoke at a meeting of the Ionia-Montcalm County Medical Society, November 23, on "Meeting the Challenge of State Socialism"; the Lansing Exchange Club, December 6, on "Living Medicine"; the Grand Traverse-Leelanau-Benzie County Medical Society, Traverse City, December 7, on "Political Medicine"; the Charlotte Lions Club, December 8, on "Two Approaches to Health."

\* \* \*

*American Academy of General Practice.* Numerous MSMS members have inquired how they may procure application blanks for the American Academy of General Practice, Michigan Branch.

Officers of the AAGP of Michigan are M. S. Ballard, M.D., 1516 Grand Rapids National Bank Bldg., Grand Rapids, President; L. T. Henderson, M.D., 13038 E. Jefferson, Detroit, President-Elect; H. F. Raynor, M.D., 1340 Maccabees Bldg., Detroit, Secretary-Treasurer.

The national headquarters of the American Academy of General Practice are located at 231 W. 47th St., Kansas City 2, Missouri. Mac F. Cahal, Executive Secretary.

\* \* \*

"Backward" doctors: "It would be much better if the AMA spent this 'educational fund' enlightening some of its own backward members," was the statement of Federal Security Administrator Oscar R. Ewing on Friday, December 3, upon being advised of the AMA House of Delegates' decision to assess members \$25 each to raise a fund for a nation-wide plan of education on the progress of American Medicine.

Since when is the most enlightened profession—that of Medicine—"backward"? Is it "backward" because it doesn't agree with Mr. Ewing's zealous enthusiasm for socialization of America?

\* \* \*

*Draft boards to defer medical students.* In a memorandum sent in early November to all state directors for guidance of the 3,657 draft boards, Major General Lewis Hershey, Selective Service Director in Washington, recommended deferment of medical students to assure the nation an adequate supply of physicians and dentists. This policy will maintain the current level of graduates from the medical and dental schools and will affect 44,000 students in medical and in pre-medical classes. The deferment policies on medical students are entirely advisory and are not binding upon the local draft boards—which decide the deferments on the merits of each individual case.

\* \* \*

*Increase in Nurses.*—More young women entered schools of professional nursing in Michigan in 1948 than at any time before or after World War II, according

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to the Michigan Nursing Center Association. A total of 1423 freshmen were admitted during the current year—an increase of 19% over 1947. The seven schools for practical nurse training sponsored by the Michigan Department of Public Instruction have a current enrollment of 360. Eventually 860 students will be trained for the one-year course.

Information and literature on the advantages of nursing may be obtained from the MNCA, 750 E. Main St., Lansing 12, Michigan.

\* \* \*

Michigan's Indian Foundation's 1949 Ottawa Indian Ceremonial will be held in July at Harbor Springs. Chief Pipi-Gwa of the Ottawas is now working with Louis J. Gariepy, M.D., Robert A. C. Wollenberg, M.D., and Joseph A. Braun, Detroit, motivating forces in the organization of the Michigan Indian Foundation, to select those white friends of the Indians who may be adopted into the tribe next July in the great semicircular stadium overlooking Little Traverse Bay where the Indian ceremonial is held annually. General Dwight Eisenhower and Admiral Chester Nimitz, adopted members of the Ottawa tribe, have promised to attend the 1949 ceremonial at Harbor Springs.

\* \* \*

The Detroit Institute for Cancer Research has been formally affiliated with the Wayne University College of Medicine, with approval by the Detroit Board of Education on October 26. Through this arrangement, the Dean of the College of Medicine shall be a member of the

Executive Committee of the Board of Trustees of the Institute, and the Scientific Director of the Institute shall be a member of the Administrative Committee of the College of Medicine.

This affiliation will bring national support to both organizations on a wider basis and will result in both organizations having greater resources in terms of personnel and research techniques upon which to draw.

\* \* \*

*Pawnbroker sign.*—The three golden balls that hang in front of every pawn shop were originally the coat of arms of the Medici family, the earliest known of the money lenders of Lombardy, Italy. The balls were first used by an agent of that family who did business. Later they were copied by everyone who made profit by lending. The sign first appeared as three gold pills, and were used by the Medici to tell the public that they knew more about medicine than anybody else. Their name comes from this. The family soon quit the practice of medicine for the more lucrative profession of lending money. They kept their coat of arms, and gave to the world the traditional emblem of pawnbrokers.

\* \* \*

The American Academy of General Practice announces the 1949 Annual Scientific Assembly at Cincinnati on March 7, 8, and 9, 1949. The program is designed by general practitioners for general practitioners. Nearly 10,000 of the nation's leading general practitioners have joined the American Academy of General Prac-





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tice—the *only* national organization to represent the interests and serve the needs of the general practitioner. This is its first annual scientific meeting. More than 2,000 doctors are expected. The program was selected by general practitioners, for general practitioners. It features topics of down-to-earth practical value to the man who today renders at least eighty per cent of the medical care furnished in this country.

\* \* \*

*Final votes* on Michigan Constitutional questions: Proposal No. 1 to clarify the succession to the governorship, passed 1,055,632 to 495,214; Proposal No. 2 to repeal sales-tax diversion, defeated 1,446,016 to 343,217; Proposal No. 3 to let legislators fix their salaries, approved 935,441 to 531,950; Proposal No. 4 to let state officials' salaries be set by law, OK'd 911, 473 to 587,691; Proposal No. 5 to liberalize the 15-mill limitation, approved 962,800 to 732,677 and Proposal No. 6 seeking voter sanction of the Callahan Act, approved 890,435 to 585,469. The voters gave the proposal for a constitutional convention an 856,451 to 799,198 majority—which was not a majority of all votes cast in the election, so this proposal was not approved—according to the Board of Canvassers.

\* \* \*

*The National Guard* is being enlarged, including its Medical Units. The Army has formed Michigan's own division, the 46th, under the command of Maj. Gen. Ralph A. Loveland. The 46th Division is now 96 per cent organized with 7,480 men—but more are needed. With the expansion, a great need for doctors to guard the health of the Guardsmen has resulted. The 46th lists eighteen Medical Corps Officers, but additional doctors of medicine are required. Physicians interested in the Guard may get in touch with the unit in their own city, or contact Lieut. Col. Gregory Moore, Division Surgeon, Cadillac. In Detroit, doctors may contact the Piquette Armory for full information on the real opportunities present for the doctor of medicine who associates himself with the Guard now.

\* \* \*

*The Northern-Tri State Medical Association* will hold its 1949 postgraduate course in Fort Wayne, Indiana, in the Chamber of Commerce Auditorium on April 12. The scientific program includes: "Surgical Emergencies of the New-Born" by C. D. Benson, M.D., Detroit; "Lesser Known Uses of Thyroid Substance" by R. C. Moehlig, M.D., Detroit; "Surgery of the Thyroid Gland" by G. M. Curtis, M.D., Columbus, Ohio; "Clinical Pathological Conference" by Bernhard Steinberg, M.D., Toledo, Ohio; "The Psychology of the Chronically Disabled Patient" by M. A. Seidenfeld, Ph.D., New York; "The Study of the Effects of Androgens on the Cardiovascular System" by J. B. Berardi, M.D., Chicago; "Office Treatment of Allergic Patients" by G. L. Waldbott, M.D., Detroit; and "The Reason for Post Graduate Medical Education" by H. H. Cummings, M.D., Ann Arbor.

Paul R. Hawley, M.D., of the Blue Cross-Blue Shield Commission, Chicago, will be the luncheon speaker. His subject will be "A Doctor Makes a Critical Survey of the Medical Profession."

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Thirteen volumes of the *National Nuclear Energy Series* have been declassified and are being edited for early publication, the U. S. Atomic Energy Commission announced today on the sixth anniversary of the operation of the first atomic pile in Chicago, on December 2, 1942.

It is expected that the Series when complete will run to about 60 volumes. Chapters or sections of NNEs volumes represent approximately one-third of the 2,400 documents so far declassified by AEC.

The National Nuclear Energy Series is being published by the McGraw-Hill Book Company under a contract with Columbia University, which represents the AEC and its research contractors. The first volume, now ready for release, is the "Histopathology of Irradiation from External and Internal Sources," edited by William Bloom, Department of Anatomy, University of Chicago.

The volumes which make up the NNEs are grouped in eight divisions corresponding to the major projects under which wartime atomic energy research activities were conducted.

\* \* \*

**Research Fellowships.**—Ten research fellowships will be awarded for one year in the fields of medicine, dentistry, and pharmacy by the University of Illinois Graduate College in Chicago.

The fellowships carry stipends of \$1,800 per year for medical and dental graduates and \$1,200 for pharmacy graduates, with exemption from tuition fees for all appointees. Registration in the Graduate College for credit toward M.S. or Ph.D. degrees is required.

Appointments cover a calendar year with a one month vacation. Fellows are eligible for re-appointment in competition with the new applicants.

Candidates should indicate the field of research in which they are interested and submit transcripts of their scholastic credits, together with the names of three former science teachers as references. Appointments will be announced March 1, 1949, or shortly thereafter. The fellowship year begins on July 1, 1949, or September 1, 1949.

Formal application blanks may be secured from the Secretary of the Graduate Committee, 1853 W. Polk street, Chicago 12, Illinois.

\* \* \*

The *Ninth Annual Essay Contest* of the Mississippi Valley Medical Society will be held in 1949. The Society will offer a cash prize of \$100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents and citizens of the United States. The winner will be invited to present his contribution before the Fourteenth Annual Meeting of the Mississippi Valley Medical Society to be held in St. Louis, Mo., Sept. 28, 29, 30, 1949, the Society reserving the exclusive right to first publish the essay in its official publication



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the *Mississippi Valley Medical Journal* (incorporating the *Radiologic Review*). All contributions shall be type-written in English in manuscript form, submitted in five copies, not to exceed 5,000 words, and must be received not later than May 1, 1949. The winning essays in the 1948 contest appear in the January 1949 issue of the *Mississippi Valley Medical Journal* (Quincy, Illinois).

Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W.C.U. Building, Quincy, Illinois.

\* \* \*

The National Physicians Committee has sent out a page headed "The Journal of the Michigan State Medical Society, Volume 47, October, 1948, Number 10," and quotes a paragraph appearing on page 1062 of that number, which is worth while repeating:

### PRINCIPAL ORGANIZATIONS PROMOTING COMPULSORY SICKNESS INSURANCE IN THE UNITED STATES

1. An organization in New York City that operates under four names:
  - (a) The Committee on Research for Medical Economics—Michael M. Davis, Chairman.
  - (b) The Committee for the Nations Health—Channing Frothingham, M.D., Chairman.
  - (c) The Committee of Physicians for the Improvement of Medical Care—Channing Frothingham, M.D., Chairman.
  - (d) The Physicians Forum—Ernest P. Boas, M.D., Chairman.

Address of the above: 1790 Broadway, New York, N. Y.

2. The CIO.
3. The AF of L.
4. The Communist Party.
5. Individuals in various Governmental agencies, among them the USPHS and the Department of Agriculture.

\* \* \*

The American College of Surgeons' initiates at the 1948 convocation in Los Angeles, October 20, included the following Michigan Doctors of Medicine: Harvey M. Andre, M.D., Grand Rapids; James H. Beaton, M.D., Grand Rapids; Robert E. L. Berry, M.D., Ann Arbor; Robert F. Berry, M.D., Marquette; William G. Birch, M.D., Kalamazoo; Gilbert Clare Bishop, M.D., Almont; Thomas A. Boutrous, M.D., Detroit; George T. Bradley, M.D., Detroit; Kenneth N. Campbell, M.D., Ann Arbor; Paul J. Connolly, M.D., Detroit; Clarence E. Crook, M.D., Ann Arbor; Joseph H. Curhan, M.D., Detroit; Marion S. DeWeese, M.D., Ann Arbor; Forest D. Dodrill, M.D., Detroit; Robert M. Eaton, M.D., Grand Rapids; Hardie B. Elliott, M.D., Flint; Byron H. Evans, M.D., Ann Arbor; David Feld, M.D., Detroit; Robert E. Finton, M.D., Jackson; J. Donald Flynn, M.D., Grand Rapids; L. Warren Gatley, M.D., Pontiac; Walter S. Glazer, M.D., Detroit; Eugene V. Gourley, M.D., Detroit; Lee O. Grant, M.D., Grand Rapids; Lawrence J. Gravelle, M.D., Detroit; Maurice J. Hauser, M.D., Detroit; Donald K. Hibbs, M.D., Battle Creek; Harold H. Hiscock, M.D., Flint; Edwin S. Hoffman, M.D., Detroit; Harvey I. Kelsall, M.D., St. Joseph; Joseph H. Kerzman, M.D., Detroit; Maurice B. Landers, Jr., M.D., Detroit; William J. McDougal, M.D., Grand Rapids;

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The 1949 Congress will be held October 17-21 at the Stevens Hotel, Chicago.

\* \* \*

*Michigan Attorney General's Opinion.*—Subject: *Chiropractors: Schools:* Chiropractor's certificate would not satisfy public instruction rule requiring physician to certify that student has passed adequate physical examination before student is eligible to engage in inter-scholastic athletic contests.—Opinion No. 842, October 27, 1948.

*By the deputy attorney general.* The superintendent of public instruction inquires whether public instruction rule 3, appearing on page 22 of Supplement No. 10, Michigan Administrative Code, would be satisfied by a chiropractor's certificate showing that a student who desires to engage in inter-scholastic athletic activities has passed an adequate physical examination and is fully able to compete in athletic contests.

The mentioned rule reads as follows:

"No student shall be eligible to represent his high school for whom there is not on file with the superintendent or principal, a physician's statement for the current school year certifying that the student has passed an adequate physical examination and that, in the opinion of the examining physician, he is fully able to compete in athletic contests."

Section 6 of the act governing the practice of chiropractic in this state, Public Act No. 145 of 1933, as amended, Stat. Ann. § 14.596, defines the practice of chiropractic as "the locating of misaligned or displaced vertebrae of the human spine, the procedure preparatory to and the adjustment by hand of such misaligned or displaced vertebrae and surrounding bones or tissues."

The quoted rule requires a physician's statement for the current school year certifying that the student has passed an adequate physical examination and that, in the opinion of the examining physician, such student is fully able to compete in athletic contests. Certainly, even to a layman, an examination confined to the location and reduction of displaced or misaligned vertebrae and surrounding bones or tissues would not be an adequate physical examination within the meaning of the quoted rule. Such examination, for example, would not disclose a majority of the ills to which the flesh is heir and which might render strenuous physical activities dangerous to health, or to life itself.

Confined as he is by statutory boundaries to the location of misaligned or displaced vertebrae and the correction thereof by hand, the chiropractor cannot, without encroaching upon fields carefully left by law to other





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healers and other branches of medicine, even diagnose or treat a broken leg let alone the many more serious ailments which might be brought to light by an adequate physical examination.

It follows that a chiropractor's certificate would not satisfy the requirement of the quoted public instruction rule.

(Signed) EUGENE F. BLACK  
Attorney General

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**FOR SALE:** One Leitz micro-projector, carbon arc type for direct current only. Excellent condition. The microscope is equipped with four objectives, ranging from a low scanning power to a high-dry and accompanying condenser for each objective, that rotate together. The arc is automatically regulated by a clock. Price \$434.00. For details, write: Superintendent, Hurley Hospital, Flint, Michigan.



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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**A.M.A. INTERN'S MANUAL.** 209 pages. Philadelphia and London: W. B. Saunders Company, 1948. Price \$2.25.

This is another pocket size book telling about interns and residencies, what the intern should get from the hospital, what the hospital expects from the intern, a tabulation of licensure requirements of the States, months and place of examinations, and fees charged, reciprocity, requirements for specialty practice, and so on. There is a section on common emergencies, and what to do; a chapter on drug administration; a very short materia medica of the more useful drugs; a chapter on acute poisoning, diagnosis and treatment; one on diet and nutrition, and one on physical medicine. A very valuable chapter is that on the lawful scope of intern practice. A chapter is devoted to the AMA and its various organizations. A valuable book for the intern and resident.

**HUMAN BIOCHEMISTRY.** By Israel S. Kleiner, Ph.D., Professor of Biochemistry and Director of the Department of Physiology and Biochemistry, New York Medical College, Flower and Fifth Avenue Hospitals; formerly Associate, The Rockefeller Institute for Medical Research. With seventy-seven text illustrations and five color plates. Second Edition. St. Louis: The C. V. Mosby Company, 1948. Price \$7.00.

This is a complete exposure of the action of biochemical substances in the body, the various food elements, fats, carbohydrates, and their study in process of body growth tissues, milk, blood, enzymes, vitamins, digestion, energy metabolism, hormones, to mention just a few. The work is in sufficient detail, and is well written. It will be a welcome addition to the library of the internist and laboratory worker.

**A-B-C'S OF SULFONAMIDE AND ANTIBIOTIC THERAPY.** By Perrin H. Long, M.D., F.R.C.P., Professor of Preventive Medicine, Johns Hopkins University School of Medicine; Physician, The Johns Hopkins Hospital. 231 pages. Philadelphia and London: W. B. Saunders Company, 1948. Price \$3.50.

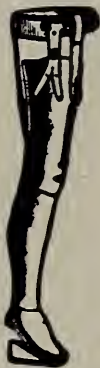
Dr. Long states in his introduction that the action and use of the sulfonamides and penicillin are so standardized that he gives the pharmacology of these in the front of the book and then proceeds to discuss various infectious conditions, giving the specific therapy under each heading. Because the streptomycin therapy is still a question of study, he mentions that drug and its use under the headings where it is applicable. After the paragraph on specific therapy in each diseased condition, the auxiliary therapy is given and a paragraph of comments. The book is very compact, thorough, and pocket size for convenience.

**TECHNIQUE OF TREATMENT FOR THE CEREBRAL PALSY CHILD.** By Paula F. Egel, Cerebral Palsy Director, Children's Hospital, Buffalo, New York. Introduction by Winthrop M. Phelps, M.D., Medical Director, Children's Rehabilitation Institute, Baltimore, Maryland. Appendix by Moir P. Tanner, F.A.C.H.A., Superintendent, Children's Hospital, Buffalo, New York. Drawings by Dorothea Mintline. St. Louis: The C. V. Mosby Company, 1948. Price \$3.50.

The problems in the treatment of cerebral palsy are well explained and outlined in this book for the benefit of the person who must actually give the treatments. The objects of treatment and what to expect are given. The disease was first recognized in 1862 by Dr. William John Little, and was called Little's Disease. Little's description

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was "a child who walked with a cross-legged gait, who drooled, perhaps grimaced, and who was believed to be the feeble-minded. "As time and effort were not expended on the feeble-minded, they were placed in an institution. Fortunately, others became interested and it was found that much could be done, for many of these persons were highly intelligent. This is a very interesting book, and the subject holds out such hope that many more persons should be interested. There are five types of the disease, and they are fairly frequent, though the book gives no indication of the percentage of occurrence. But there are enough to make a real problem in a community of 100,000 persons, at least seven or eight every year probably, making this understanding a useful knowledge.

**THE SHAME OF THE STATES.** By Albert Deutsch. A Reynal and Hitchcock Book. New York: Harcourt, Brace and Company, 1948. Price, \$3.00.

The publisher's announcement to the reviewer says:

"Mr. Deutsch is an authority on this problem. Last year he received the Lasker Award Citation for 'Outstanding contribution to the advancement of mental health.'"

Karl A. Menninger in his Introduction says:

"Mr. Deutsch knows how to describe vividly as well as accurately what he sees, and to interpret it in terms the public understands."

The book questions, Who are the insane? It outlines the evolution of state care for mental patients, of whom 85 per cent are in state institutions. Many hospitals were visited and pictures taken, nude wards, leaking walls and roofs, no eating utensils, crowded conditions; Detroit's Receiving Hospital Psychopathic wards; "Gross neglect was evident at every turn," 289 patients herded in wards intended for 126. One out of every four patients was under some form of mechanical restraint. Three pictures are shown from Receiving in Detroit all of patients strapped to benches, beds or to each other. If the scenes and conditions described have a fraction of truth, this is a horrible condition, but strangely this is one of the outstanding fields where government has entered socialized medicine, the type of medical care that Mr. Deutsch advocated for the whole population.

"During a recent state administration when politics were particularly rank, the managing officer of a hospital for the insane with over 3,000 of these poor unfortunates under his care, received positive orders from the governor of his state to employ only such help as was selected for him by a local ward politician, a third class automobile repair man. The managing officer, who possessed some pride and some conscience promptly resigned, and a politician was appointed in his place who was willing to do the governor's and the garage man's bidding."\*

**OCCUPATIONAL THERAPY SOURCE BOOK.** Edited by Sidney Licht, M.D., with an introduction by C. Charles Burlingame, M.D., Psychiatrist in Chief, The Institute of Living, Baltimore: The Williams & Wilkins Company, 1948. Price \$1.00.

The subject of occupational therapy is traced back to the time of Asclepiades, Hippocrates, Herodicus of Selymbria, Celsus, and down through the ages. The first article is a historical digest. Then are presented several rather extensive abstracts of books and other

\*Dr. Edward H. Ochsner's book on "Social Security."



works of Philippe Pinel, M.D., "Medical Philosophical Treatise on Mental Alienation," Paris, 1801; Johann Christian Reil, Halle, "Rhapsodies on the Treatment of the Insane" 1803; William S. Hallaran, M.D., Cork, Ireland, "Extended Observations on the Cure of Insanity," 1810; Benjamin Rush, M.D., of Philadelphia, "Medical Inquiries and Observations Upon the Diseases of the Mind, 1812; Samuel Tuke, York, "Description of the Retreat, an Institution Near York for Insane Persons, 1816; "F. Leuret, Paris, "On the Moral Treatment of Insanity," 1840; Felix Voisin, Paris, "Idiocy Among Children," 1848; Thomas Story Kirkbride, M.D., LL.D., Philadelphia, "On the Construction, Organization and General Arrangements of Hospitals for the Insane," 1880; and lastly an article by Eva Charlotte Reid, M.D., on "Ergotherapy in the Treatment of Mental Disorders" in the *Boston Medical and Surgical Journal* of August 20, 1914.

**YOUR BABY.** The Complete Baby Book for Mothers and Fathers. By Gladys Denny Shultz, Contributing Editor, Ladies' home Journal; and Lee Forrest Hill, M.D., Former President, American Academy of Pediatrics. Photography by Joseph Di Pietro; Line Drawings by Reisle Lonette. Garden City, N. Y.: Doubleday & Company, Inc., 1948. Price, \$3.50.

This is one of the best books on the preparation for, and care of the new baby that this reviewer has seen. It is recommended to prospective first parents on a number of counts.

1. First of all, it recognizes the young father as one of the parties of the first part and suggests practical ways in which he can ease the new burden of the untried mother.

2. It assumes that the baby will come into a home which will have no outside help, so the parents must shift for themselves, and advice and counsel are given accordingly.

3. It is written with rare common sense and understanding of the situation and is given sympathetic treatment throughout.

4. It is written in clear, concise, everyday English that people of average intelligence can understand perfectly—no scientific terms are used to puzzle and confuse. Care of the new baby is put on a completely human basis, with a common sense approach to every problem. You somehow have a feeling that the authors are good friends



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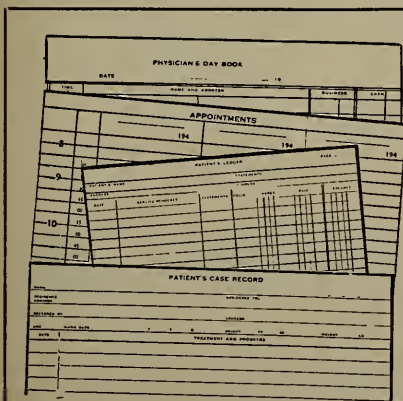
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**DETAILED ATLAS OF THE HEAD AND NECK.** By Raymond C. Truex, M.S., Ph.D., Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University, and Carl E. Kellner, Artist, Department of Anatomy, College of Physicians and Surgeons, Columbia University. New York: Oxford University Press (114 Fifth Ave.), 1948. Price, \$15.00.

The teaching of anatomy is difficult at best, but these authors have spent many years in careful dissection and sketching, and have produced the most exquisite set of plates we have ever seen. There are 156 plates, many of them covering a large quarto page, printed in colors. The first eighty-two plates are of regional anatomy; posterior neck and back, spinal nerves and cutaneous areas, lateral neck and axilla; anterior neck and thorax; lateral face, pharynx and oral cavity; cranial cavity and contents; brain, circulation, topography and dissection; cerebellum; labyrinth, cavernous sinus, orbit, eye; pharynx and esophagus, nasal cavity; tonsil and floor of oral cavity. There follow twenty-two plates of skeletal structures, cervical vertebrae, skull, ear bones, hyoid bones, atlanto-axial joint, paranasal sinuses and median section of the skull. Lastly are frontal and transverse sections of the head and neck. A running comment of the text of the book is given, with a very elaborate index. This book is a work of art, truly.

**RESEARCH IN THE SERVICE OF MEDICINE.** Volume 22. Cancer, visual studies of pathology, and diagnosis. Chicago: Medical Department of G. D. Searle & Co. (P.O. Box 5110), 1948. Free upon request.

This is a beautifully illustrated booklet on cancer, with color plates of lesions and pathological slides. There is also a short dissertation on therapy. The booklet was prepared as a contribution to the crusade against cancer.

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## HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 16, 1948

- Monthly financial reports and bills payable were presented, studied and approved.

- The Executive Director invited attention to the fact that the MSMS membership was at its highest peak, in all the history of the Society (4,960).

- Telegram received from AMA Secretary George F. Lull, M.D.: "Recent Interim Session House of Delegates unanimously decided to assess each member of the American Medical Association twenty-five dollars. You are requested to collect this assessment through your county units or any other way you desire. Bill Association for any extra expense in connection with collection." The Executive Committee of The Council instructed that a telegram be sent to Michigan county medical society secretaries to proceed with the collection of the AMA assessment, and to forward same to MSMS, as a separate fund for transfer to the American Medical Association.

- Effort to increase number of students graduated from medical schools. The report of the Special Committee on this matter tied in with the report of the Liaison Committee with the U. of M. President (December 10, 1948) at which Dean A. C. Furstenberg presented the following statistics: 72 per cent of students in Michigan's two medical schools are residents of Michigan; 28 per cent are non-residents of Michigan.

1. Of 226 students who entered Michigan medical schools this year, 207 were Michigan residents and nineteen were non-residents. No non-residents were admitted to Wayne University College of Medicine in this year's freshman class.

2. Fifty-seven Michigan residents entered medical schools outside the State of Michigan this year, making a total of 264 Michigan residents who entered medical schools in the United States this year.

3. The ratio of Michigan students in training outside of this state to non-residents in training in Michigan is 3 to 1.

4. Fifty-nine hundred students will be graduated this year; six new medical schools are being

created; six more are going into a four-year curriculum.

5. The 196,000 doctors of medicine in the United States represent one to every 790 persons in the population. In England the ratio is one to 1,490; in Germany, one to 1,600; in the Netherlands, one to 1,800 plus. Therefore, there are three times as many doctors of medicine in the United States per unit of population as there are in other countries.

The trouble is not a lack of doctors of medicine but improper distribution and utilization.

- Proposed Veterans Administration hospitals. Progress report was presented; the Hoover Commission may publish a statement on the over-duplication of government hospitals resulting in a large amount of money wasted, without benefit to patients.

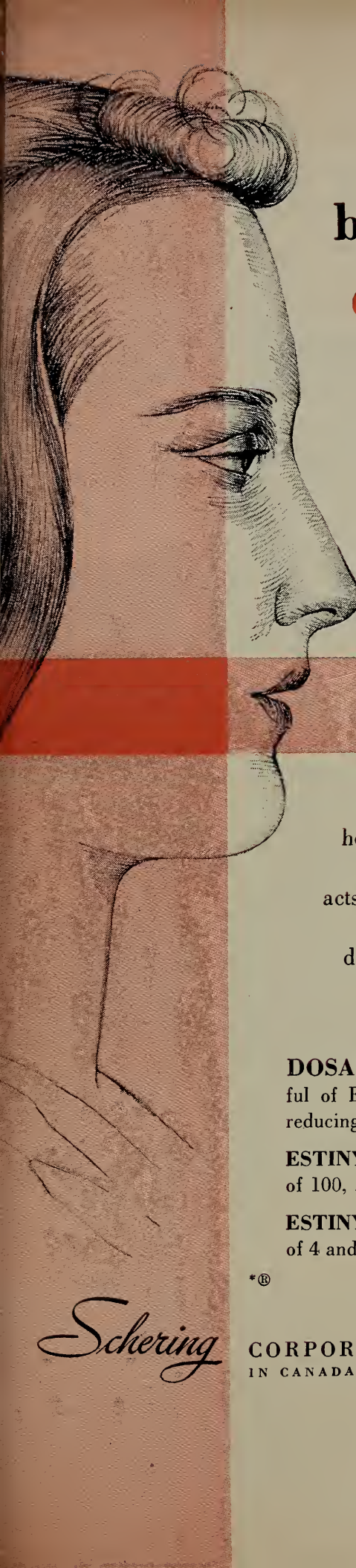
- Mediation Committee. The work of this new Committee was discussed with the Chairman, W. Z. Rundles, M.D., Flint. Each county society is to be requested to form its own Mediation Committee.

- Immunization Month was set for May, 1949, and plans for co-operation between practitioners and health departments, to the end that all Michigan children be immunized against smallpox, diphtheria, whooping cough and tetanus, were discussed with Michigan Health Commissioner A. E. Heustis, M.D.

- Amendments to the Michigan miscarriage law, recommended by the MSMS Maternal Health Committee, were discussed with Drs. R. B. Kennedy, Detroit, Chairman; A. M. Campbell, Grand Rapids, and P. E. Sutton, Royal Oak, and approved by the Executive Committee of The Council.

- Committee reports were approved from the Venereal Disease Control Committee, Committee on Scientific Work, Liaison Committee with Michigan Pharmaceutical Association, Permanent Conference Committee, Committee on Child Health

*(Continued on Page 134)*



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## HIGHLIGHTS OF THE COUNCIL

*(Continued from Page 132)*

Survey, Child Welfare Committee, Committee on Basic Science-Medical Practice Acts, Health Survey Advisory Committee and Sub-Committee of Michigan Heart Association. The program of the Annual County Secretaries-Public Relations Conference of January 9, 1949, was approved.

- Public Education. The Special Committee on Education submitted its C.A.P. program for the emergency. The Committee was authorized to proceed at once, and to procure adequate assistants in the public relations department.

A letter of congratulations to the American Medical Association on dissemination of "Uncle Sam, M.D." was authorized, with the request that further information on its "grass roots" program be requested so that early progress in Michigan may be accomplished.

- The Committee on Uniform Fee Schedule for Governmental Agencies was authorized to re-survey the Schedule, as of 1949.

- The Cancer Committee was authorized to mail its Cancer Bulletins to the MSMS membership in eight mailings during 1949.

- 1949 Annual Session in Grand Rapids. J. Duane Miller, M.D., was appointed General Chairman; H. J. Van Belois, M.D., Chairman of Committee on Scientific Exhibit; C. A. Payne, M.D., G. T. Aitken, M.D., and P. W. Kniskern, M.D., members of the Press Relations Committee; Jos. R. Lentini, M.D., Chairman of the Housing Committee.

- Revised Constitution and By-Laws of MSMS. 500 copies were authorized to be sent to MSMS Delegates, Councilors, and county society officers.

- The Michigan Medical Assistants Society requested the appointment of an Advisory Committee, which was authorized and referred to Chairman O. O. Beck for appointment.

- Program of Michigan Cancer Day, scheduled for Grand Rapids, Saturday, September 24, 1949—the day following the MSMS Annual Session—was approved. Sponsors will be the Michigan State Medical Society and its Cancer Control Committee; the American Cancer Society, Michigan Division; and the Michigan Foundation for Medical and Health Education, Inc.

## TEN COMMANDMENTS OF PREPAYMENT

### *Number One*

Thou shalt not allow the quality of medical service to the individual American ever to deteriorate behind a curtain of prepayment.

### *Number Two*

Thou shalt not take a fee for service from the prepayment plan fund and then add an extra extreme bill thereto to the patient merely because you can get away with it.

### *Number Three*

Thou shalt not disparage the voluntary prepayment system, for American medicine is committed to this method of easing the financial burden of sickness.

### *Number Four*

Thou shalt not over-sell prepayment—it is only one of the several elements available to assist individuals in the pursuit of health, and is only one answer to the federal control of medicine. There are many others as can be seen from the Ten Point National Health Program of the AMA.

### *Number Five*

Thou shalt not damn prepayment with faint praise.

### *Number Six*

Thou shalt readily admit some imperfections inherent in prepayment. At the same time thou shalt indicate that the voluntary and experimental nature of prepayment plans constitute a great measure of their strength.

### *Number Seven*

Thou shalt do everything possible to help maintain actuarially correct data and as a participating physician thou shalt willingly provide necessary information which will enable prepayment plans to keep necessary records.

### *Number Eight*

Thou shalt abide by the decisions of the majority in your society and publicly support the prepayment plan adopted and do your utmost to make it work.

### *Number Nine*

Thou shalt not, however, become a prepayment "Cultist," stating that one particular type of voluntary prepayment system is the only correct method and that all other approaches are wrong.

### *Number Ten*

Thou shalt continue as an American physician

*(Continued on Page 136)*



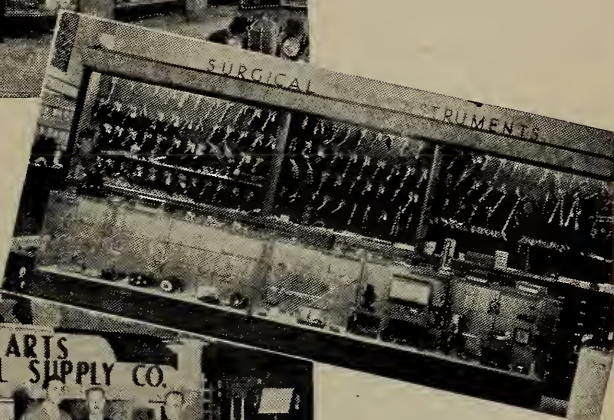
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## TEN COMMANDMENTS OF PREPAYMENT

*(Continued from Page 134)*

to stress the dignity of the individual and the fact that one's health is much more the concern of the individual than it is the concern of any political unit of society, and shall continue to urge all individuals to assume their proper share of this responsibility.

EDITOR'S NOTE—Special attention is called to number eight. Our accepted program should have complete support.

*News Letter of AMA Council on Medical Service, Nov. 23, 1948.*

## THIS FIGHT IS YOURS

"We need—and we must have without further delay—a system of prepaid medical insurance."

With these words, President Truman in his "State-of-the-Union" message to Congress on January 6, made it clear that he will insist on compulsory sickness insurance.

As the American Medical Association's nation-wide educational campaign takes shape, it is becoming increasingly evident that *a great part of the burden of telling the story of American Medicine to the public will have to be carried by state and county medical societies.* As a spokesman for the American Medical Association put it in a recent letter, "Your state association and your office, as well as your member societies, will be in the front lines of the 'grass roots' campaign to convince the American people that voluntary medical care is better for them by far than any compulsory system."

No doctor should feel that the payment of the \$25 assessment puts an end to his responsibilities. That is just a start. There is a big job to be done, one which requires every resource that the doctor and his professional organizations can marshal.

The time to act is *now*. Compulsory socialized medicine shapes up as one of the most important issues of the year. The government planners are lining up their big guns for an all-out attack upon private medicine. They cannot be repelled by half-hearted measures. It will take a vigorous defense and a spirited counter-attack—possible only by the united action of every individual member of the American Medical Association.

## "TRUMAN CALLS FOR FIVE FOLD RAISE IN SOCIAL-SECURITY TAXES"

This headline appeared in the *Detroit Free-Press* of January 15, with the following subhead immediately beneath it—"Employees May Pay \$168 a Year."

This graphic presentation indicated that if an employee's salary reaches \$4,200, and the minimum tax rate is 4 per cent for old age pensions and health insurance (which eventually it will be, at least) the \$4,200 worker will pay \$168 a year in Social Security taxes.

That's quite a nick in the annual income of our worker-population! How many have experienced an annual health expense of \$168—year in and year out?

## NO MIRACLES FROM SOCIALIZED MEDICINE

"State Medicine Hasn't Worked Any Miracles" is the title of an excellent editorial which appeared in the January 22 *Saturday Evening Post*. This well-written paper chides Social Security Administrator Oscar Ewing for calling the 180,000 practicing physicians of this country "selfish." The *Post* asks this question to Administrator Ewing: "Which is more important: the opinions and professional standards of 180,000 doctors who have been trained to practice medicine and who have raised American medical care to a level achieved nowhere else, or the supposed notions of some millions of laymen that if Medicine became a Federal bureaucracy, better medical care would follow immediately?"

The article goes on to state that the large bloc of professional social workers, whose benefits from such a scheme are obvious, has sold the idea of socialized medicine to millions. "Already the private physician has been successfully smeared to the satisfaction of millions as a profiteer whose interest in medicine is that it pays better than selling vacuum cleaners."

Every doctor of medicine should read the *Post* editorial of January 22—and see that his patients do likewise.

## HOOVER'S REPORT

With the headline "The Taxpayer is Sick," the *Detroit Free Press* of December 28 reported on the Hoover Commission's findings of duplications in federal agencies and federal spending. "Advocates of federal control of public health under socialized medicine won't like this report," stated the *Free Press*. It brought out that already, forty-four different federal agencies are spending public money on medical service—spending about \$1.25 billion in 1948! "Already the pork-barrelers have forced the over-building of federal hospitals and have sought to justify them by insisting that they treat many categories of patients who have no claim on their services. Several federal agencies now are planning to spend another one-hundred million dollars on hospitals in the New York area, where the Hoover sub-committee can find no evidence that such additional facilities are needed. That's bad politics. The patients are not benefited. The taxpayers are mulcted.

"The vast bureaucracy represented in Washington by the Federal Security Administration let out another hole in its belt to accommodate more pap-suckers and extend the area of Socialism.

"We hope Congress ponders on this result of federal extravagance before falling for 'State Medicine.'"

## Good Results from the Hoover Report

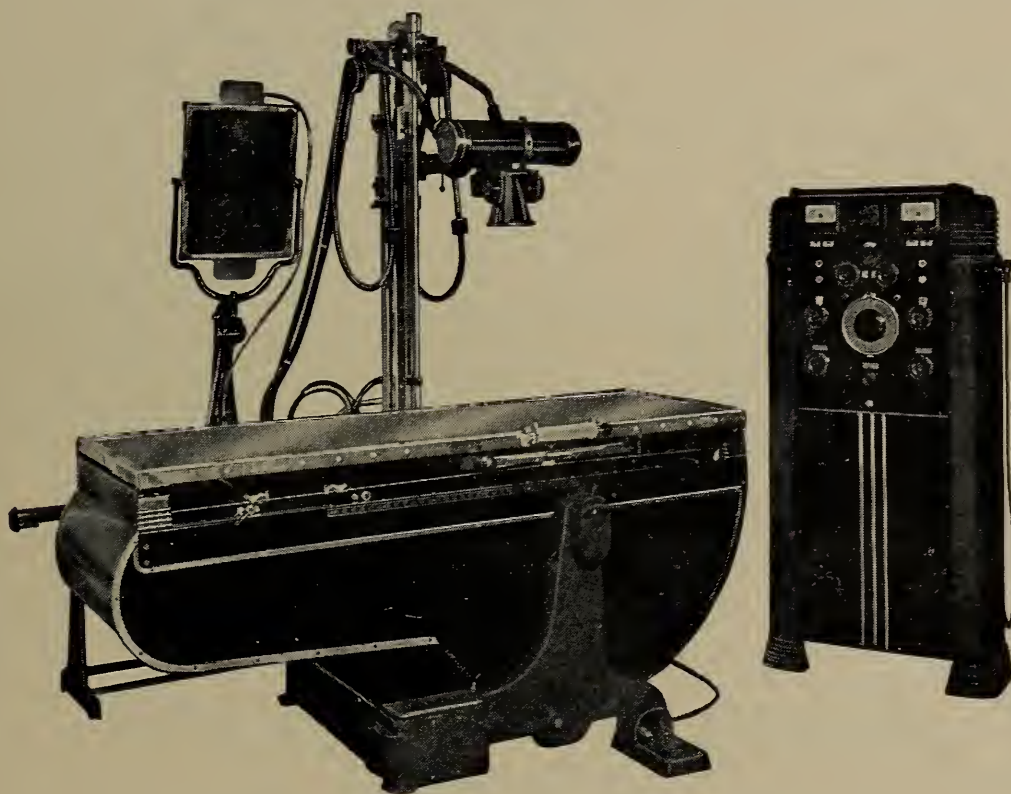
The Veterans Administration, in a January 10, 1949, news release, admits the truth of the Hoover Commission criticism, with the following statement:

"The study (made by VA) has shown that estimated needs for hospitals, made during and immediately after the war, were considerably larger than actually has proven necessary, although admission policies have been such that more than two out of three patients are admitted for non-service-connected ailments." The release goes

*(Continued on Page 138)*



This ultra modern 200 MA two tube full wave diagnostic unit used so successfully by the Army now with rotating anode tube and therefore particularly well adapted to hospital and clinical requirements is now available for civilian institutions and physicians at our usual reasonable price. Also furnished for use in connection with our floor-ceiling rail Tube-stand and our photo fluoro-graphic 70 M.M. chest unit.



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## HOOVER'S REPORT

(Continued from Page 136)

on to state that the President has ordered a reduction of 16,000 beds, which means the cancellation of twenty-four new VA hospitals and the reduction in size of fourteen others.

Carl R. Gray, Jr., Administrator of Veterans Affairs, stated: "To construct new hospitals which we cannot staff, and therefore cannot put into use, would be an indefensible waste of public money." Mr. Gray states that the elimination of proposed new beds in VA hospitals will result in a saving of two hundred and eighty million dollars.

Among the VA projects to be eliminated under the terms of President Truman's orders are the Grand Rapids General Medical Hospital of 200 beds; the Toledo, Ohio, Neuropsychiatric Hospital of 1,000 beds, and the Detroit Tuberculosis Hospital of 500 beds.

## HIGHEST MEMBERSHIP

The membership of the Michigan State Medical Society was at its highest peak in all history, as of January 1, 1949. A total of 4,960 members was listed on the rolls of the State Society.

## JOHN BULL'S MEDICAL BINGE

(Extracts from *Newsweek* of January 10, 1949, regarding Britain's National Health Act which began to operate on July 5, 1948.)

## What Price Health?

Almost everyone refers to the health service as "free." It isn't, of course, although the actual increase in weekly national-insurance taxes has been very small, averaging about 15 cents for an employed man and ten cents for an employed woman.

The money collected in this way does not, however, pay more than one-fifth of the cost of the health service. The government pays the rest out of other taxes. The cost of the service to the average income-tax payer has been estimated at a little over a shilling a pound, or about five per cent of income. But the health service will admittedly cost much more than has been estimated. For the first nine months it was budgeted at \$520,000,000, exclusive of national-insurance contributions and sums received from local authorities. The sum probably will be close to \$800,000,000.

## Doctors Defiant

What both doctors and dentists fear most is that British medicine will be nationalized and that they will be put on straight salaries. The Health Ministry denies such a program, but Aneurin Bevan is on record as favoring salaries and clinics over fees and private offices.

Inspired by both dissatisfaction and fear, belligerent doctors made an effort last week to rally support for a physicians' strike against the implementation of the health service. Through the medium of the *British Medical Journal*, Dr. J. A. H. Sykes of Croydon, Surrey, wrote: "The alternative to a Ministry refusal to give adequate living facilities to men who have spent a lot of time and

expense in acquiring their skill and experience seems to be a wholesale resignation and a return to private practice, or emigration."

## MICHIGAN'S HEALTHIEST YEAR

The year 1948 was the healthiest in the history of Michigan, according to A. E. Heustis, M.D., Michigan State Health Commissioner. On the basis of the first ten months' figures, the state's death rate will drop to 9.15 per 1,000 population as compared with the rate of 9.36 in 1947 and the previous low of 9.52 in 1942. The incidence of communicable disease and its death rate in Michigan will also reach an all-time low. Infant and maternal death rates will also be at all-time lows.

Mr. Ewing, please take note of this accomplishment—under a system of *voluntary* medical practice!

## IMMUNIZATION MONTH—MAY, 1949

The month of May, 1949, has been set aside as "Immunization Month for Michigan." Each doctor of medicine in the state will be notified, through his county medical society, of detailed plans for immunizing all children against smallpox, diphtheria, whooping cough, and tetanus.

The usual splendid co-operation of all practitioners is invited during "Immunization Month," May, 1949.

## STERILIZATION

The authority for sterilization is found in Act 281 of the Michigan Public Acts of 1929, as amended by Act 97 of the Public Acts of 1941, and Act 235 of the Public Acts of 1943.

Any mentally defective person (which includes feeble-minded, insane, epileptic, idiotic, imbecilic persons, moral degenerates, and sexual perverts) may be sterilized upon proper hearing by the Probate Court that such person would be likely to procreate children with a tendency to mental defectiveness and that the condition of such defective person is not likely to improve and that such children might be a menace to society or become wards of the State. In such cases the Court shall make an order requiring such treatment or operation as will effectively render such defective person incapable of procreation.

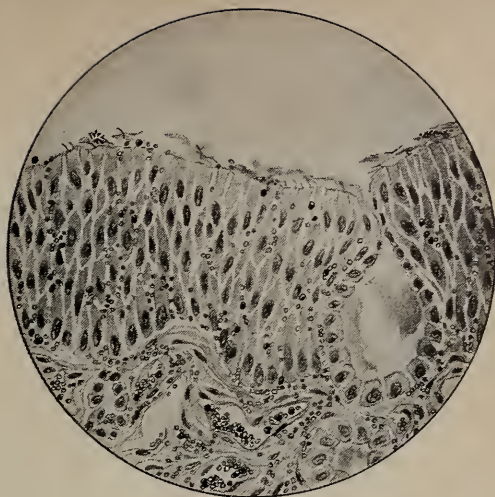
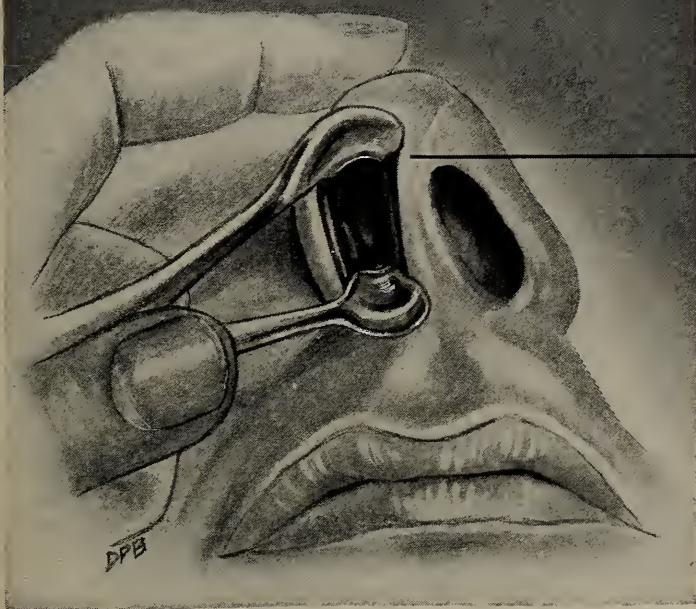
An inmate of the State Hospitals for the Insane, the Michigan State Prison, or other similar state institutions, may be given sterilization treatments if the governing board makes a finding that such mentally defective person should be so treated and if the defective person, his or her guardian, and his or her husband, wife, or other next of kin, signs the consent for such operation. That is to say, if a mentally defective person over sixteen years of age has been found by the governing board of a state institution, after proper investigation, to be a person who should be sterilized, then a written consent should be obtained from the person to be sterilized and also from his or her guardian, if there be such guardian; further consent is required from either the husband or wife, if the defective person is married, and if not, from the father, mother, brother, sister, child or next of kin.

Where it is not possible to obtain consent of an inmate of a state institution and the other persons required to

(Continued on Page 140)



promotes  
aeration . . . free drainage  
in colds  
. . . sinusitis



Nasal membrane showing increased leukocytes with denudation of cilia.

Normal appearing nasal epithelium.



Nasal engorgement and hypersecretion accompanying the common cold and sinusitis are quickly relieved by the vasoconstrictive action of

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## STERILIZATION

(Continued from Page 138)

consent in his behalf, then it is possible for the superintendent, or other officer of such institution, to file application with the Probate Court and obtain an order from the Probate Court for such sterilization.

No law exists authorizing surgeons to perform sterilization by consent except in the case of an inmate of a state institution.

The operating surgeon, in order to protect himself from liability for a sterilization operation, should have a copy of the consent, signed by the proper persons, or a copy of the Court order, as the case may be.

## ALL-DAY SESSIONS OF EXECUTIVE COMMITTEE—MONTHLY

The Council of the Michigan State Medical Society meets thrice annually, in three-day sessions.

Ten years ago, the Executive Committee of The Council, which meets monthly, was able to conduct its business from 6:30 to 10:30 p.m.

During the war years and subsequently, the work before the Executive Committee of The Council required its convening at 2:00 p.m., and running through the evening. However, in recent months, the meetings have lasted well after midnight, with many items on the agenda untouched.

Beginning with February, 1949, the Executive Committee of The Council will begin its monthly session at 10:00 a.m. It is hoped that by remaining on the job all day and evening, the Executive Committee will finish its strenuous task of discussing and making decisions on the fifty to sixty items which invariably are presented to this body every thirty days.

The great plurality of items are of policy-making character and require thorough discussion and presentation of all viewpoints, before final adoption. In this, The Council and its Executive Committee of the Michigan State Medical Society find themselves in a vastly different position than the board of directors of a routine corporation, whose agenda usually is mainly financial in character.

## POSTGRADUATE INSTRUCTION

### Temporomandibular Articulation

An evening postgraduate course of six lectures on the temporomandibular joint will be offered by the University of Illinois College of Dentistry beginning Wednesday, March 23, 1949.

Dr. Bernard G. Sarnat, head of the department of oral and maxillofacial surgery, will be in charge of the course entitled "Oral Surgery II—The Temporomandibular Joint." It will be offered over a period of six successive Wednesdays from 7:30 to 9:30 p.m.

The subject matter will include anatomical, physiological, and pathological considerations of the temporomandibular joint as well as problems in surgical and non-surgical treatment of these conditions. The final session will be devoted to a round-table discussion.

The course will be of value to physicians in general practice, oral and maxillofacial surgeons, and otolaryngologists.

Further information may be secured by writing to Dr. Bernard G. Sarnat, University of Illinois College of Dentistry, 808 S. Wood Street, Chicago 12, Illinois.

### Diabetes

The Frank E. Bunts Educational Institute and Cleveland Clinic will present a continuation course for physicians entirely devoted to the diagnosis and management of diabetes and its complications. The course will be held on March 17, 18, and 19. Drs. Henry T. Ricketts of Chicago, John S. L. Browne of Montreal, and H. L. C. Wilkerson of the United States Public Health Service will be the out-of-town guest speakers. Dr. E. Perry McCullagh is director of the course. In addition to the regular faculty of the Institute several prominent Cleveland physicians will give lectures.

Inquiries regarding the complete program and registration can be addressed to the Director of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

### Psychiatry

The Postgraduate Center for Psychiatry, Inc., the training associate for the Institute for Research in Psychiatry, has been granted a provisional charter from the Board of Regents of the New York State Educational Department. It offers intensive training for psychiatrists in psychotherapy leading to certification, and also individual courses for general practitioners and non-psychiatric medical specialists in psychotherapy and psychosomatic medicine. Further information may be secured from Stephen J. Jewett, M.D., Dean, Postgraduate Center for Psychiatry, Inc., 218 East 70th Street, New York 21, N. Y.

## TEN REASONS WHY SOCIALIZED MEDICINE SHOULD NOT BE INTRODUCED INTO AMERICA

1. The standard of medical service will deteriorate. There would be too many calls. No incentive on the part of the doctors. The calls would be trivial to a great extent. More than three-fourths of the doctors would be dissatisfied.

2. The physician-patient relationship would be destroyed. Not enough time would be devoted to the patient by each doctor, because of an avalanche of work.

3. There will be no or very little choice of a doctor of medicine.

4. The government would develop a hospital monopoly. The local control of hospitals is very important and especially the work of auxiliary groups which would be lost—therefore the friendly touch would not be found in the hospital which would be soulless as a prison.

5. No hospital rooms for deserving patients because of trivial demands of more politically powerful.

6. Productive medical research would diminish.

(Continued on Page 152)



## Old Age NEED NOT MEAN *Chronic Illness*

Clinical studies<sup>1,2,3</sup> demonstrate that the results of inadequate dietaries are insidiously cumulative and may not become evident for many years. Many of the afflictions of old age are now attributed to lifelong faulty dietaries and no longer need be the inevitable accompaniment of advanced years.

In advanced age the wisdom of dietaries high in vitamins, minerals, and protein, low in fat, and moderate in carbohydrate, is pointedly emphasized in reported clinical studies. Liberal amounts of vitamin B complex and of calcium, in particular, are important for increasing

the appetite and for supporting the calcium integrity of the skeletal structure.

Ovaltine in milk, a delicious *multiple* dietary supplement, is highly useful in the management of aged patients. Its multiple vitamins, its important minerals, and its biologically complete protein are the very nutrients required for effecting full adequacy of even seriously faulty diets. The refreshing tastefulness and easy digestibility are welcomed by the aged.

The rich dietary contribution made by three daily glassfuls of Ovaltine in milk, is outlined in detail in the table.

<sup>1</sup> Boss, E.P.: The Physiologic and Clinical Phenomena of Aging, New Orleans M. & S. J. 97:64 (Aug.) 1944.

<sup>2</sup> Spies, T.D., and Collins, H.S.: Observation on Aging in Nutritionally Deficient Persons, J. Gerontol. 1:33 (Jan.) 1946.

<sup>3</sup> Stieglitz, E.J.: Therapy of the Aged, M. Ann. District of Columbia 17:197 (Apr.) 1948.

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## Ovaltine

Three servings daily of Ovaltine, each made of  
½ oz. of Ovaltine and 8 oz. of whole milk,\* provide:

CALORIES . . . . .	676	VITAMIN A . . . . .	3000 I.U.
PROTEIN . . . . .	32 Gm.	VITAMIN B <sub>1</sub> . . . . .	1.16 mg.
FAT . . . . .	32 Gm.	RIBOFLAVIN . . . . .	2.0 mg.
CARBOHYDRATE . . . . .	65 Gm.	NIACIN . . . . .	6.8 mg.
CALCIUM . . . . .	1.12 Gm.	VITAMIN C . . . . .	30.0 mg.
PHOSPHORUS . . . . .	0.94 Gm.	VITAMIN D . . . . .	417 I.U.
IRON . . . . .	12 mg.	COPPER . . . . .	0.5 mg.

\*Based on average reported values for milk.



# Socialized Medicine

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## THE HEALTH OF NATIONS

What effect would compulsory sickness insurance have upon the health of the nation? This is the question explored by the Research Council for Economic Security, Chicago, in its recent study entitled "The Health of Nations."

It is often claimed that the nation's health would be greatly improved under a compulsory system of prepayment for medical and hospital care. This study shows little evidence to support this view. The record under one system is hardly better than that under another.

The study is based on a comparison of certain health indices—infant mortality, male life expectancy at birth, death rates from selected causes. Prewar figures were used to avoid distortions from wartime conditions.

Countries having compulsory sickness insurance include France, England, and Germany. Those with a private fee-for-service voluntary system are the United States, Canada, and Australia. A third system, where health insurance plans are nominally voluntary but actively subsidized and regulated by government, is found in Sweden, Denmark, and Belgium. Since the war, however, Australia, Sweden, and Belgium have made their systems compulsory.

"The system of paying for medical care does not in itself appear to play a major role in the health of a nation," the study says. "Therefore, one should be careful in assuming that the adoption of any system of paying for medical care, compulsory or otherwise, will of itself make for a decided improvement in the health indices."

The Council points out that better results might be expected by developing and expanding medical facilities, eliminating economic and social inequalities between races, paying more attention to living standards, nutrition, and other factors which directly affect the health of the people.

## THE TAXPAYER IS SICK

### Hoover's Report

Advocates of Federal control of public health under socialized medicine won't like a report by Hoover Commission experts.

Already forty-four different Federal agencies, the committee points out, are spending public money on medical service. They'll spend \$1.25 billion this year.

As a result of duplication, and other factors, a large amount of this money is wasted, without benefit to *patients*, whose welfare should be the only consideration.

All over the Country the Public Health Service competes with the armed services and they compete with each other in building hospitals that would not be needed under any intelligent system of co-ordination. This wastes money. Also it prevents the most efficient use of available medical skill.

Take the situation in New York. The Navy has one hospital there, the Army and Air Force have four, the Public Health Service has three and the Veterans Administration three—a *total of eleven hospitals with 8,257 beds and only 5,330 patients.*

The Hoover subcommittee points out that closing some of these Federal hospitals and co-ordinating the work of the others would save money, would reduce the Army and Air Force medical officers by 80 to 85 per cent, and "at the same time provide better medical care for service personnel."

Will this sensible suggestion be carried out? We doubt it. Anything the Federal Government touches is shot through and through with politics.

Already the pork barrelers have forced the overbuilding of Federal hospitals and have sought to justify them by insisting that they treat many categories of patients who have no claim on their services.

Yet several Federal agencies are now planning to spend another \$100,000,000 on hospitals in the New York area, where the Hoover subcommittee can find no evidence that such additional facilities are needed.

That's politics. The patients are not benefited. The taxpayers are mulcted.

The vast bureaucracy represented in Washington by the Federal Security Administration lets out

*(Continued on Page 144)*



## STOP NEEDLESS STEPS

Yes, stop needless steps. That's what the new Hamilton No. 9595 Eye, Ear, Nose and Throat cabinet is designed to do for you. It is a mobile unit you can easily move to your working area. Three inch rubber-tired casters and chrome handles at each end facilitate moving. Place it at your most convenient operating position. Not one wasted step is necessary. All your instruments and materials are at your finger tips. Better adapted too, for working from a sitting position, which cuts down your fatigue after a busy day. Your patients appreciate the fast, efficient treatment made possible by modern equipment. Disappearing bottle compartment keeps medicines out of sight—leaves working surface clear. Yet, at the touch of a button, bottles raise up into clear view and easy reach. See the No. 9595 mobile EENT specialists cabinet and the complete line of Hamilton Surgical Equipment at Randolph's.

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## THE TAXPAYER IS SICK

(Continued from Page 142)

another hole in its belt to accommodate more pap-suckers and extend the area by Socialism.

We hope Congress ponders on this result of Federal extravagance before falling for "state medicine."—*Detroit Free Press*, December 28, 1948.

## PHYSICIAN—HEAL THYSELF

In his State of the Union message, President Truman, as was anticipated, asked Congress to enact a compulsory health insurance law, which would be the first step toward a system of socialized medicine.

Once the health insurance program is in effect, there is little doubt but that the full regimentation of the medical profession and its patients will be next on the agenda.

What is behind this determination to place the care of the sick under the benign supervision of a Federal bureaucracy? Why, in a United States which has the highest levels of health and the best standards of medical care, is there an attack on this aspect of our private enterprise?

Advocates of socialization make ridiculous claims that 300,000 persons die annually because they are deprived of adequate medical attention. Coming closer to truth, they say that many areas of the United States, particularly rural areas, are short of doctors, hospitals and public health facilities.

As the Free Press has insisted, these inadequacies can be corrected without resorting to socialized medicine.

One of the Nation's most eminent medical authorities challenges the claim that we are short of doctors and hospitals in this Country. Today we have 196,000 doctors, a ratio of one to each 719 patients.

This same authority admits that the distribution is not on the basis of the national ratio, and there are areas which are understaffed. The solution, he says, is not more doctors, but what he terms "offering special opportunities and inducements for beginning practitioners to establish themselves in small towns."

One reason they prefer not to do so now, is because small communities lack hospitals, laboratories, and the facilities for up-to-date scientific work.

These are deficiencies which would be wisely

corrected by the Federal Government through a program of intelligent assistance.

But when we talk about full utilization of professional services, it is our opinion that another factor is involved which the profession itself is generally prone to overlook.

That is the tendency of some doctors to coast along on the tide, following the line of the least professional resistance.

Such doctors, we believe (and hope) are a small minority. But there are enough of them to weaken public confidence in all of the fraternity.

If there is a popular feeling for social medicine, we suspect it is rooted there.

A lazy doctor is not a good doctor—and, unfortunately, it is human nature to be lazy. The practitioner who neglects to keep abreast of scientific development, who closes his mind to progress, and rests upon his diploma, is dangerous to his patient and to the community.

Dressing it own ranks by insistence on maintenance of professional standards, is where the medical profession can best protect itself against demands for socialization.

The question of the patient's life enters into this consideration.

Society demands that an automobile driver be examined periodically to determine his fitness to operate a car. A cook and waitress in a public eating place have to meet certain standards through annual examination. Those things are required to protect the public.

Is it any less important that a doctor be called upon at regular periods to prove his competency to continue in practice?

Such a procedure would, we believe, restore much public confidence in the medical profession. It would assure the public that it was in good hands, and, perhaps, materially help still the clamor for socialization which politicians demagogically raise upon the fears and prejudices of the people.

What does the American Medical Association say to that?—*Detroit Free Press*, January 10, 1949.

## VA HOSPITALS

President Truman's recommendation to congress to cut back the veterans hospital construction program was a quick response to recent criticisms in the Hoover commission survey of federal medical

(Continued on Page 146)

**WHEN HE'S  
TEMPTED BY  
FORBIDDEN  
FOODS . . .**

What's a man to do? He's  
tired of dieting.  
The vision of new  
health and a better  
figure faded with  
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and now all he can see  
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TABLETS, 2.5 and 5 mg.

ELIXIR, 20 mg. per fluidounce.

AMPOULES, 20 mg. per cc.



## VA HOSPITALS

*(Continued from Page 144)*

facilities and earlier complaints by the American Hospital association.

One of the few instances in which his budget message reflected an effort to eliminate duplication and waste in the government, Mr. Truman's request proves that such action can be obtained if aggressive citizenship is organized to go after it.

The campaign against construction of VA hospitals in areas where military and general hospitals already have vacant beds was led last year by Graham L. Davis of the W. K. Kellogg Foundation while he was president of the American Hospital association. Although misinterpreted at first by some veterans organizations as a move against their interests, the Hoover commission task force of medical experts found appalling instances of excessive cost and unnecessary construction in the failure to integrate the needs of veterans with those of community and military hospitals.

Of the ninety VA hospitals originally authorized last year, the President asked that twenty-four projects be cancelled and that the capacity of fourteen others be cut. Among the eliminated projects was a 200-bed hospital scheduled for Grand Rapids. This newspaper had already questioned its need in view of the existence of 500 spare beds at the army's Percy Jones General hospital here. The various branches of the federal government should not be so independent that reciprocal arrangements cannot be worked out to utilize fully all its medical resources.

Mr. Truman's message at least shows that something can be accomplished when interested citizens take the bull by its horns.—*Battle Creek Enquirer-News*, January 13, 1949.

## BIG WASTE FOUND IN U.S. SPENDING ON HEALTH SERVICE

## Too Many Hospitals Built, Hoover Survey Shows

A picture of multimillion-dollar waste and duplication in the Government's medical services was outlined in a report to the Hoover Commission.

The report said that in 1948 more than 14 Federal agencies spent about \$1,256,000,000 for health and medical services, with the Government taking care of 24,000,000 persons in varying degree, or about one-sixth of the nation's population.

In 1949 it said, the Veterans Administration alone will spend as much as all the Federal agencies spent on such services in 1948. One-half will be spent for the construction of new VA hospitals.

The survey was made by a "task force" committee set up by the Hoover Commission studying reorganization of the executive branch of the Government.

The report declared that about 900,000 Army and Air Force dependents alone receive complete Government medical care "on no basis other than an appropriation act passed more than 60 years ago authorizing medical officers to care for dependents 'whenever practicable.'"

Major recommendations in the report included:

1—Creation of a new Cabinet post to embrace health, education and security.

2—Drafting of medical personnel for the armed services.

3—Creation of a National Science Foundation.

The advocated National Bureau of Health to be established within the Cabinet would oversee all non-military aspects of the Federal medical program.

The report stated that while a draft of medical personnel for the armed services was advisable, "it will bring in only young doctors who cannot provide high-grade specialized care."

The report declared that the present system of caring for veterans with nonservice-connected disabilities is "unequitable to veterans and unsound and expensive for the Government."

It suggested that Congress create a health insurance plan for veterans having nonservice-connected disabilities. These veterans who were able to do so would pay their own insurance premiums. When this was found to be impossible, the Government would pay the premiums.

Veterans who neither paid premiums nor had them paid by the Government would not be entitled to VA care.

The report urged further unification of armed force medical services but said it would have to be geared to further unification of the armed forces themselves.

It recommended that Federal grants to states be made "on a more general basis" and advocated Federal aid to medical schools.

Greater encouragement of preventive medicine to save lives and money was proposed.

The report told of huge new hospitals built by one Federal agency although near-by hospitals operated by another had plenty of empty space. It declared that literally dozens of Federal hospitals could be shut down and their patients shifted to other uncrowded quarters.

The report cited a new \$14,800,000 permanent Navy Cancer Hospital being constructed at St. Albans, N. Y., with a betatron for cancer radiation described as the largest ever built for cancer therapy. It said:

"We question why the care of cancer patients, except superficial cases, should be a responsibility of the armed forces at all."

The committee said it found that four Army and Air Force hospitals in the New York City area could be

*(Continued on Page 148)*



*Building for his future . . . with*

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## BIG WASTE FOUND

(Continued from Page 146)

closed, reducing the requirements for medical officers by 80 per cent. But it said:

"Several Federal agencies are planning to build hospitals in this area to cost \$100,000,000, meaning a doubling of the permanent plant. There is no evidence that such additional beds are needed."

The committee, headed by Assistant Secretary of the Army Tracy S. Voorhees, recommended to the Hoover Commission that Federal medical services should be co-ordinated to "correct the extravagances resulting from the present series of unrelated projects."

It stressed that such co-ordination would result in improvement of the quality of care given many patients.

In a statement accompanying the report, Commission Chairman Herbert Hoover commented:

"We all want our veterans and members of the armed services to have first-rate medical care. The problem is to provide such care without overtaxing our limited number of trained physicians and other medical resources.

"This means we must eliminate waste in the use of these physicians and in the use of these resources. Thus, also, we can eliminate waste of the taxpayer's money. Unless we do, veterans, servicemen and civilians alike will suffer."

The report noted that the Veterans Administration has a hospital construction program estimated to cost \$1,100,000,000, with each bed costing from \$20,000 to \$51,000. It compared this with an average cost of \$16,000 for private hospital beds.—*Detroit Free Press*, Dec. 26, 1948.

## NO ADVERTISEMENT FOR STATE MEDICINE

An appalling picture of waste, duplication, and inefficiency was presented by the Hoover commission on reorganization of the executive branch of the government after a survey of the operations of more than forty federal agencies administering medical care. The fact that there were more than forty of them is itself primary evidence of the wild bureaucratic proliferation in this field, which, under New Deal plans for compulsory health insurance and socialized medicine, would be vastly expanded.

The Hoover commission found that the government already has undertaken to provide some degree of medical care for one person of every six in the country. It is extending complete medical care free to 900,000 dependents of former service men without other authorization than a 60-year-old appropriation act authorizing such care "wherever practicable."

Each of the military services, the veterans administration, and the public health service, together with thirty-seven other agencies, are in the business of providing medical care. The services, the VA, and the health service all have extensive hospital facilities, while the national institutes of health at Bethesda, Md., are to represent a forty million dollar investment in clinical research by the government, with a 500-bed hospital on the side.

Each of these enterprises proceeds in its own way without reference to or integration with any of the rest. Thus, in the New York area, the commission found that four army and air force hospitals, now maintained with full staffs, could be closed, reducing requirements for medical officers by 80 to 85 per cent in the area, with an actual improvement in the standard of service. But, instead of cutting down at New York, several federal agencies are going ahead with plans to build another 100 million dollars worth of hospitals.

Much the same situation was found in San Francisco, where the commission reported that seven of thirteen federal hospitals could be closed, there being only 4,200 patients to 9,900 beds. In Honolulu the army has just opened a 1,500-bed hospital in spite of the existence of an adjacent navy hospital which could meet all current needs.

Again, the commission found, the veterans administration is building hospitals much faster than physicians can be recruited to staff them, while its 1 billion 100 million dollar building program is in conflict with the declared government policy of aiding nonfederal hospitals to provide the nation with a better hospital system.

At best, there is waste and, at worst, graft, in the federal hospital construction program, for government building costs \$20,000 to \$30,000 a bed, against \$16,000 for private hospitals. The whole report shows the usual trend toward bureaucratic empire building, with thousands of unneeded administrative payrollers cluttering up the scene.

The commission's belief that some improvement could be achieved by centralizing all these activities in a new department to be managed, with cabinet rank, by Oscar Ewing, the federal security administrator, seems to us unduly optimistic. Ewing, a New Deal politician out of Wall Street, with close connections with Ed Flynn's Bronx machine, is one of the chief power grabbers in the Truman administration, and this solution would give him just what he's looking for.

Deluded citizens who expect miracles to follow if only the government takes over all medical care have, in the Hoover report, a show window of what the system would really be like. It is no advertisement for socialized medicine, and providentially, it has been submitted just when it will have the best educational effect upon the new congress which is to consider these proposals.—*Chicago Daily Tribune*, Wednesday, January 5, 1949.

## AMA APATHY TOWARD HEALTH PROPOSAL SEEN

Representative Dingell (D., Mich.) predicted today (December 10) that more than half of the members of the American Medical Association will refuse to contribute to a fund to oppose a government health insurance program.

The association's house of delegates decided last week to assess each of the 140,000 AMA members \$25 to finance such a campaign.

Dingell, one of the sponsors of legislation under which wages and payrolls would be taxed to meet hospital and

(Continued on Page 150)



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FEBRUARY, 1949

*Say you saw it in the Journal of the Michigan State Medical Society*



## AMA APATHY SEEN

*(Continued from Page 148)*

doctors' bills, called the organization's action "a declaration of war."

"Mr. Average Citizen is going to have to accept the challenge," he told a reporter.

Dingell said nearly all doctors he has talked to are in sympathy with the legislation, once it has been explained to them, "but they don't have a free expression."

"In my opinion," he added, "far more than half of them will not contribute to the war chest which the AMA says it is going to raise."

In Boston earlier this week, Dr. Channing Frothingham, two-time president of the Massachusetts Medical society, somewhat similarly predicted "a grass roots rebellion" against the AMA proposal.

Frothingham is chairman of the committee for the nation's health, which he described as a nationwide organization of doctors and laymen in favor of compulsory health insurance.

Dingell said some doctors may feel they must contribute to the AMA fund lest they be barred from hospitals.

"The hospitals will have to take stock," he said, "and decide whether they are going to be tools of the AMA or semi-public institutions."

Health insurance legislation has been urged repeatedly by President Truman, and Dingell said its chances of enactment in the new Democratic-controlled congress are "very good."—AP, Washington.

## FEDERAL MEDICINE BOOBY TRAP

It seems certain that we are going to take another step on the road to bureaucratic collectivism by the passage of a compulsory health insurance bill, to which President Truman is pledged.

The United States Public Health Service is for it, as every government agency is always for a vast extension of its powers. The labor unions and farmers' organizations are for it because it sounds good. Industry would like to saddle the federal government with the expense of workmen's compensation cases. Professional social workers foresee great opportunities for themselves.

A mere 150,000 physicians, 90 per cent of whom are against it, cannot buck the trend. Besides, they are supposed to be "prejudiced" on the current theory that those who know most about anything are not reliable witnesses.

I am not against compulsory health insurance because it is "socialistic," but because it is the application of national socialism in the least appropriate field. Also, I have lived under such medical systems in England, Austria and Germany, and they were awful.

The great joker in all these schemes is that they are put forward as "free," meaning something for nothing. Let their proponents at least tell the truth. What is advocated is compulsory insurance.

Every worker in this country will have the cost subtracted from his pay envelope, and added (by his em-

ployers) to the price of everything he buys. He will be paying for unused aspirins when he needs the money for oranges. He will be supporting innumerable filing clerks—a horrendous paper staff for 150,000,000 people. When and if he gets ill, he will find himself as one of 50 patients (half of them hypochondriacs bent on getting service for their money) whom a physician must examine in an hour!

And if he really is ill—and finds that under the slap-happy methods of overworked doctors, whose fees are assured anyhow, he gets not better but worse—he finally will, in desperation, consult one of those private physicians who refuse to join the assembly line and, atop all he already has put up, week by week, pay a private fee.

How do I know this? Because I have experienced it.

Just why this most inventive country seems compelled blindly to copy social measures originating elsewhere is baffling. We need better health service. Granted. We need many, many more hospitals. The existing hospitals need public aid, since the sources of private support are increasingly drained off in taxes. And we need more genuinely free medicine for people in real jams.

But before Congress passes any bill for universal sickness insurance—falsely called "health" insurance—it owes it to the American people to tell them exactly what a person with, say, an income of from \$2,000 to \$3,000 a year is going to have to pay over a working life of 40 years to take care of his illnesses, and just what services the government positively guarantees him in return for his money. Will it, for instance, sign on the dotted line that if his wife is in labor, the government guarantees a bed and a physician at the critical moment?

Don't make me laugh! I've lived under these schemes.—DOROTHY THOMPSON, *Chicago Daily News*, Dec. 21, 1948.

## PEPPER-SLAUGHTER FORUM DEBATE ON COMPULSORY HEALTH INSURANCE

Florida's Senator Claude Pepper, silver-tongued orator of the Senate, and Florida's distinguished author-lecturer-surgeon, Dr. Frank G. Slaughter, chairman of the Public Relations Committee of the Florida Medical Association, met head on in a lively verbal tilt in Jacksonville on November 18 in an open forum sponsored by the Jacksonville Junior Chamber of Commerce. "Should Congress Enact Compulsory Health Insurance Legislation?" was the subject of the debate.

The nation's foremost advocate of compulsory health insurance advanced the usual arguments, long since worn threadbare, to bolster his pet scheme, declaring the compulsory plan to be "the Democratic approach to the essential problem of prolonging the life and preserving the health of the American people." In the light of the truth, it takes intestinal fortitude possessed only by the very few—especially among those expected to be responsible—and intelligent representatives of the citizenry—to have the temerity to drag out again and again the creaky skeleton of 40 per cent rejections in Selective

*(Continued on Page 152)*

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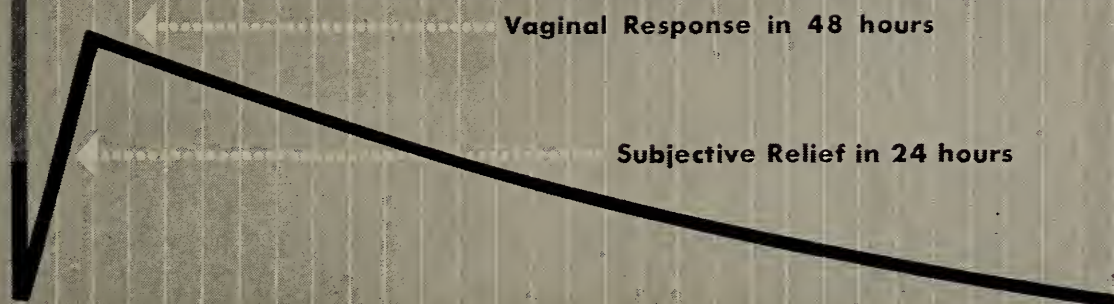
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## PEPPER-SLAUGHTER FORUM DEBATE

*(Continued from Page 150)*

Service and with clanging oratory lay this high rate to conditions resulting from lack of medical care. Too, the sob story indictment of the medical profession, charging it with neglecting the medical needs of the people and leaving millions of low income workers without medical care, grows boring, to say the least, to any person who will take the trouble to inform himself.

With scintillating clarity, Dr. Slaughter, in refuting these claims, characterized the Senator's favorite legislative child as "a hydra-headed brat, sired by three men in the pay of the Federal Government, Altmeyer, Ewing and Falk, and designed further to regiment the American people." He was quick to remind the capacity audience and the radio listeners that the doctors of the country are giving away a million dollars a day in free medical services and are fostering nonprofit plans for prepaid medical care through the Blue Cross and Blue Shield whereby people may protect themselves. Point by point, Dr. Slaughter knocked down the Senator's straw men as he built up the case against socialized medicine, blasting into absurdities the pious claims and formidable sounding statistics of his opponent. His brilliant rebuttal was abundantly attested by the overwhelming approval of the forum and the radio audience.

Stung by the exigencies of the moment into recanting somewhat in view of his wholly untenable position, Senator Pepper sought to mitigate his blistering accusations by suave speech and hollow expressions of personal admiration for the medical profession—an old, old story all too familiar to Florida doctors and sorry camouflage indeed for an ardent proponent of socialized medicine, by whatever name it may be called. Every thinking man of medicine must realize that any advocate, much less an aggressive champion, of governmental control of the profession brands himself as its sworn enemy.

Having stated publicly his intention to introduce before the next Congress a proposal for compulsory health insurance, Senator Pepper specifically identified it as following the familiar Wagner-Murray-Dingell line. It is no happenstance that on the day he was in Jacksonville contending against Dr. Slaughter's cogent presentation of the true situation, Dr. Arthur Altmeyer of the Social Security Board announced that not only would compulsory health insurance be proposed to the next Congress but also compulsory insurance for wage loss from sickness, the second head of proposed legislation described by Dr. Slaughter as the "hydra-headed brat." And the day following, Mr. Oscar Ewing, Federal Security Administrator, made a similar statement before a national labor group.

The physicians of America face today the most critical fight in their entire existence, the fight for survival as a free profession. The enemies of medicine, led by Altmeyer, Ewing and Falk, powerful triad in the Federal Security Administration and the Bureau of Research and Statistics, have as their spokesman one of America's finest orators, the man whose tongue is feared most of all on the floor of the Senate. His mellifluous

tones promise to unwary voters a Utopia which could only be a pitfall. Not only would it wreck the health record of American Medicine and the American People, but all too soon it would engulf the nation's health and the national economy in a maelstrom of destruction from which there would be no escape.—Editorial, *Florida Journal*, January, 1949.

## NATIONAL HEALTH SERVICE

Evidence comes in from all over the country that doctors' surgeries are crowded out, and the doctors themselves deplore that this heavy pressure of work has made it at times impossible for them to give their patients adequate care and attention. If the demand for the doctor's time continues at the present level we can foresee that in the event of an epidemic in the winter the life of the general practitioner in particular will become intolerable. The Minister of Health himself has felt obliged to urge the public to use the new Service with prudence and discretion.

Our correspondence columns show that general practitioners from all parts of the country are critical of many aspects of the Service and are especially apprehensive about their economic position. It would seem fair to assume that the general practitioner in the big industrial areas should be earning not less than he did before July of this year; but he is having to work very much harder for it, and in conditions which he deplores as unsuitable for the practice of good medicine. The Remuneration Subcommittee of the Insurance Acts Committee had before it on October 28 an amount of evidence on which it is to assert the economic case of the medical profession. The medical profession is at the moment doing its job in extremely difficult circumstances, and it is up to the Government to meet promptly the causes of discontent which now prevail.—*N.H.S. British Medical Journal*, Nov. 13, 1948.

## TEN REASONS WHY SOCIALIZED MEDICINE SHOULD NOT BE INTRODUCED INTO AMERICA

*(Continued from Page 140)*

7. Some M.D.s would become corrupt—a black market would develop.

8. Political control will encourage corruption.

9. Tremendous cost—ten to twelve billion dollars—four to five per cent out of payrolls, the balance out of general taxes.

10. You can't get something for nothing. There is a limit to soaking the rich. When you soak the corporations you soak yourself, through increased cost of the manufactured product.

Let's be sure national sickness insurance will succeed before the good which we now have is tossed out and something which is untried is accepted in its place.

We must increase immediately the scope of voluntary health service.—Extracts from address of WARREN H. COLE, M.D., Chicago, Professor of Surgery, University of Illinois, presented at Annual County Secretaries-Public Relations Conference, MSMS, Detroit, January 9, 1949.

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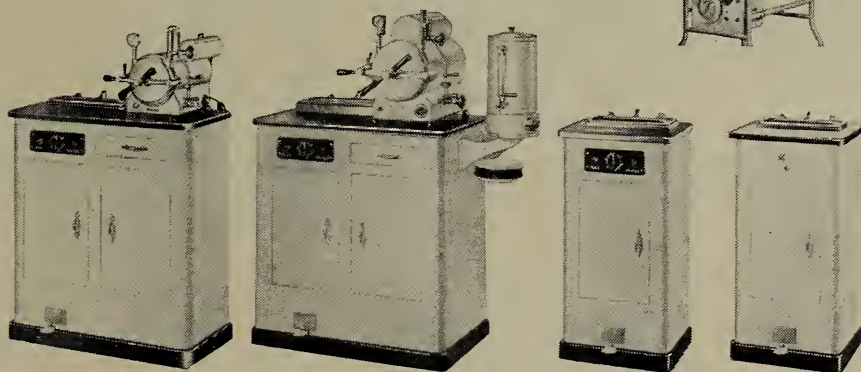
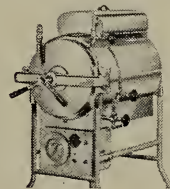
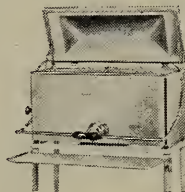
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# American Academy of General Practice President, E. C. Texter

Michigan and its medical profession are signally honored in the selection of a Detroit physician to head the American Academy of General Practice

for the ensuing year. E. C. Texter, M.D., becomes American Academy of General Practice President at its first annual session in Cincinnati, March 7-8-9. He is the second President of the general practitioners' organization.



E. C. TEXTER

Dr. Texter was born in Monroe, Pennsylvania, in 1893. After receiving his M.D. degree from Wayne University in 1917, he interned at Providence Hospital, Detroit, and subsequently took postgraduate work at Harvard Medical School. During World War I, he served in the Medical Corps of the United States Navy for two years.

After the war, Dr. Texter began practice in Detroit and immediately became active in the work of his county and state medical societies. After service as President of the East Side (Detroit) Medical Society, he was elected Secretary of the Wayne County Medical Society, Secretary of the newly formed American Academy of General Practice of Wayne County, and Chairman of the Medical Co-ordination Committee of the American Academy of General Practice. On the state level, he served on the Michigan State Medical Society's Public Relations Committee and as a member of the Board of Michigan Medical Service. His many civic activities resulted in his being chosen as Wayne County Medical Society representative to the Detroit Council of Social Agencies.

Dr. Texter's hospital affiliations include staff membership at St. Mary's Hospital, Providence Hospital, and Holy Cross Hospital of Detroit. He is active in the work of The Players, the Detroit Yacht Club, and the Detroit Athletic Club. His fraternity is Phi Chi.

Dr. Texter was married to Helen Rochford in 1918. The Texters have two children, Helen Patricia Ann Texter and E. Clinton Texter, M.D., teaching fellow in medicine at Cornell University Medical College and research fellow in medicine

at New York Hospital, working with Irving S. Wright, M.D.

The new President of the American Academy of General Practice combines two sterling qualities that have aided him in his successful ascent to the top—industry and modesty. "Tex" is known by all as a hard worker, but his accomplishments are marked by such unassuming diffidence that credit for some of his well-done jobs oftentimes goes to another. Along the way, however, "Tex" has made many friends in all parts of the country, and these doctors know him for a man of progressiveness and action. So when the time came to select a President for the newly formed American Academy of General Practice, it was only natural that practitioners throughout the United States selected that "worker from Detroit," that general practitioner who has kept in the foreground by remaining in the background—E. C. Texter, M.D.

Cancer of the stomach is apparently about twelve times more frequent in patients with pernicious anemia. Frequent stomach x-rays should be of distinct value in such individuals.

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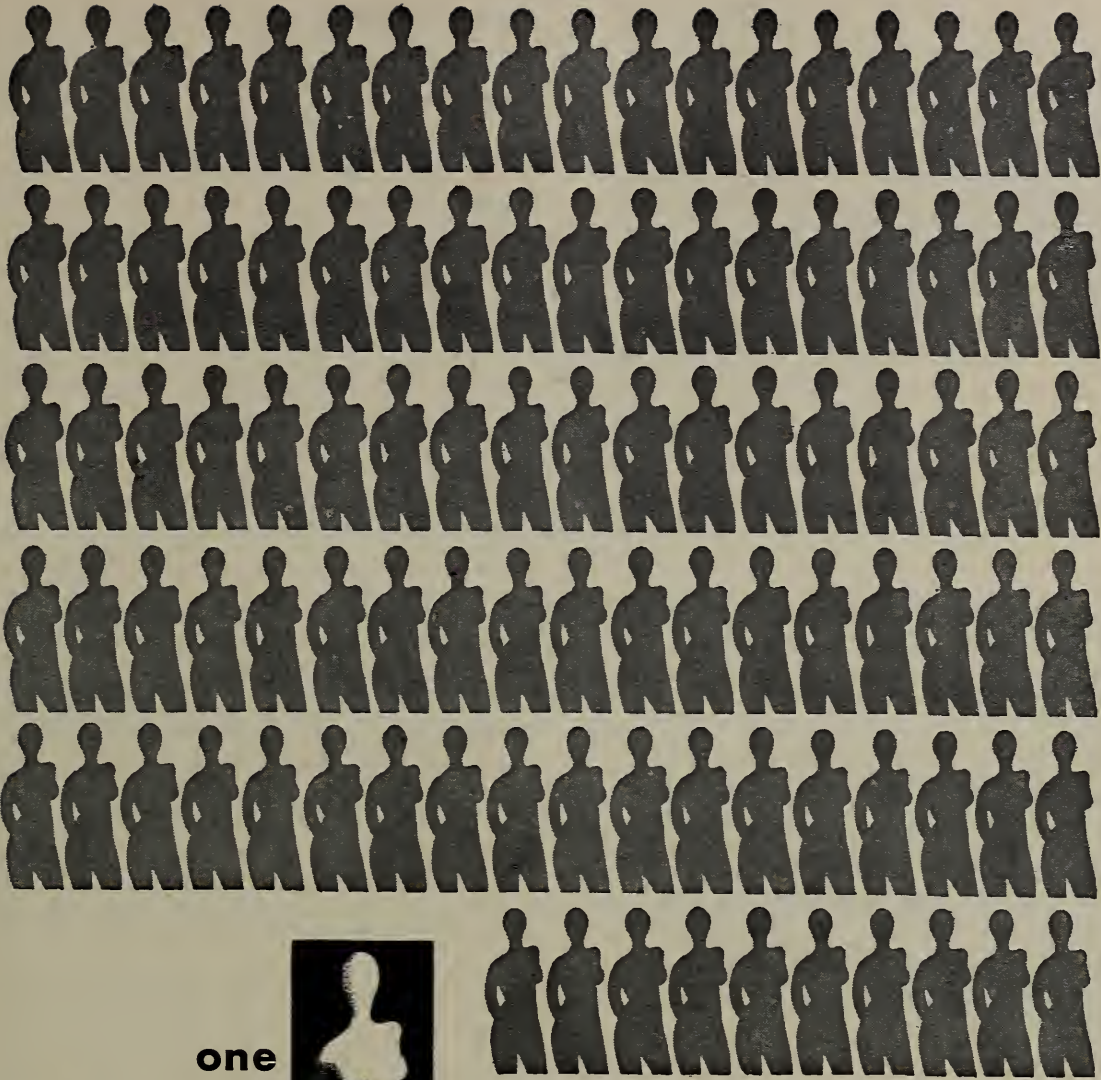
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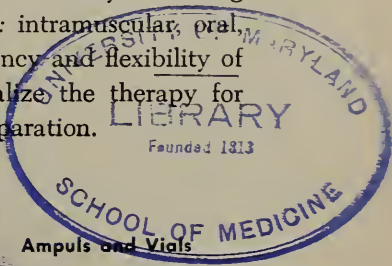
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# Cancer Comment

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## CANCER DEATH RATES IN PHYSICIANS

Skepticism is expressed occasionally as to the effectiveness of public cancer educational programs in bringing the patient with a malignant lesion to the physician in an early stage of his disease. Some idea of the problems involved in making cancer education effective can be obtained by viewing the physician as a cancer patient. It is reasonable to expect that the physician with his professional knowledge would recognize in himself signs and symptoms of cancer at the earliest possible stage and would seek medical care promptly. Certainly the public could not be expected to do as well in this regard as the doctor.

In spite of the advocacy of the periodic health examination, it is not a widespread practice on the part of the general public or the individual physician. There is little evidence that physicians, as a class, practice any better personal hygiene, especially in the matter of diet and in the habitual use of alcohol and tobacco, than does the general population. We can assume, therefore, that the physician is no more apt to have a malignancy discovered by a periodic physical examination than the ordinary layman. We can also assume that whatever factors produce cancer in lay people are active to the same extent in physicians. Both the lay person and the physician, at the present time, depend upon signs and symptoms to focus attention on a malignant lesion. The difference between the groups rests on the fact that physicians have had an education in cancer far superior to that obtainable by the layman no matter to what practical lengths the cancer education of the public may be carried.

In an article by Dublin and Spiegelman, on "The Longevity and Mortality of the American Physician," published in the *Journal of the American Medical Association*, August 9, 1947, it is shown that deaths among physicians due to cancer were 198 per 100,000 while deaths among all white males were 244 per 100,000, a ratio of 4 to 5; or stated in another manner, 20 per cent fewer cancer deaths in American physicians than in American men in general. The same authors in the August 21, 1948, issue of the same *Journal*, discuss

the mortality of medical specialists, where it is shown that the cancer death rate of all specialists is about 10 per cent lower than of the medical profession at large. It is pertinent that the mortality rate from cancer among general surgeons is only 81 per cent of the rate for physicians in general and is appreciably lower than that for any other specialty or non-specialists. It is logical to assume that the advantage to the general surgeon in this regard may be a result of his training in the early recognition of signs and symptoms of malignancy and his knowledge of the benefit of early treatment.

In summary, one can say that doctors, as a class, die less frequently of cancer than other American males; that, in turn, specialists die of cancer less frequently than the non-specialists; and, of the specialists, the general surgeons have by far the lowest cancer death rate. Although other factors play a part, it is evident that the mortality rate for cancer varies inversely with the amount of knowledge of cancer possessed by the individual.

These conclusions lend impetus and encouragement to cancer education programs for the general public. They also point to the need for continued education among physicians. It does not appear that the cancer death rate among physicians is low enough to stimulate any great professional pride on their part.

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Approximately 50 per cent of carcinomas of the cecum and ascending colon are resectable where diagnosed. Following removal, 40 per cent of the patients remain well for five years.

. . . . .  
If digital and proctoscopic examinations are negative in a patient suspected of having a rectal malignancy, x-ray examination of the colon is indicated to rule out a serious lesion higher up.

. . . . .  
Microscopic serial sections of prostates removed for benign hypertrophy will show an incidence of up to 80 per cent with at least small areas of malignant degeneration.

. . . . .  
Do you know that last year in Michigan cancer caused more deaths under age twenty than did acute rheumatic fever, measles, diphtheria, poliomyelitis, scarlet fever, whooping cough and syphilis combined?

. . . . .  
Do you know that cancer of the central nervous system, leukemia and lymphoblastoma are the most common types of cancer in childhood?



For surface infections . . .



*Although burned tissues supply an excellent medium for bacterial growth, infection may be minimized by the prompt, topical application of an efficient antibacterial agent. For this purpose, fine-mesh gauze strips impregnated with Furacin Soluble Dressing may be used. The effectiveness of Furacin in combatting mixed infections of burns without delay of healing has been well demonstrated.\* Furacin N.N.R., brand of nitrofurazone, is available as Furacin Soluble Dressing and as Furacin Solution, both containing 0.2 per cent Furacin.® These preparations are indicated for topical application in the prophylaxis and treatment of infections of wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. Literature on request.*

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\*Snyder, M. L., Kiehn, C. L. and Christopherson, J. W.: *Mil. Surgeon*, 97: 380, 1945. • Shipley, E. R. and Dodd, M. C.: *Surg., Gynec. & Obst.*, 83: 366, 1947 • Mays, J. L.: *J. Med. Assoc. Georgia*, 36: 263, 1947. • Curtis, L.: *Surg. Clin. N. America*, 1466 (Dec.) 1947.



# Blue Cross Community Enrollment in 1949

Blue Cross community enrollment activities will receive greater impetus this year through closer co-operation by the state's doctors participating in the Michigan Medical Service program and by members of the Women's Auxiliary to the Michigan State and county medical societies.

The medical profession and its auxiliaries' interest in Blue Cross is not new. A program of public education in matters pertaining to Blue Cross, its purposes and benefits, was undertaken by the doctors and their wives in various communities throughout the past year. Blue Cross literature was distributed to interested patients and questions answered by the doctors' secretaries, who, at luncheon and dinner meetings with Michigan Medical Service representatives, were "indoctrinated" in the non-profit medical care program. Members of the state and county medical society auxiliaries served as volunteer workers in Blue Cross community enrollment campaigns by staffing enrollment headquarters, and, in some instances, by distributing Blue Cross pamphlets to their neighbors.

At a meeting of the Michigan Medical Service Board of Directors last September, a vote of thanks was given to the women's auxiliaries for their assistance in the community enrollment campaigns. This was followed by an official vote of the state auxiliary to continue to lend assistance when needed.

Blue Cross community enrollment drives are conducted primarily for the purpose of giving an opportunity for Blue Cross protection to those people ineligible for Blue Cross membership through employe or other recognized groups. While the Michigan Hospital Service-Michigan Medical Service contract for community-enrolled subscribers offers better protection than that provided by commercial insurance plans, it must, for actuarial reasons, be less comprehensive than the Blue Cross group contract. Community enrollment campaigns, however, untap many group enrollment possibilities; in the fifteen campaigns undertaken during 1948, there were a total of 125 Blue Cross groups enrolled as result of the community enrollment activities.

The tentative schedule for Blue Cross community enrollment campaigns in 1949 is as follows:

Petoskey-Cheboygan, February; Hillsdale-Coldwater, February; Port Huron, March; Bay City, March; Lansing, April; Benton Harbor, April; Grand Rapids, May; Muskegon, May; Allegan-Holland, June; Ironwood, June; Marquette, July; Pontiac, July; Alpena, August; Traverse City, August; Kalamazoo, September; Battle Creek, September; Cadillac-West Branch, October; Jackson, October; Flint, November; Saginaw, November; and Ann Arbor, in December.

Michigan Medical Service participating doctors will continue to serve on important Blue Cross steering committees for the community enrollment campaigns, will continue to provide Blue Cross literature for their patients, and will co-operate in the "indoctrination" of their secretaries in the Blue Cross program. Members of the state and county medical society auxiliaries will staff Blue Cross community enrollment headquarters, as they have done in the past, and will serve, too, as speakers' bureau on Blue Cross matters. Short talks, prepared by Blue Cross, have been made available to auxiliary members for presentation before other civic groups to which they belong.

By this personal and "intimate" contact of the medical profession and its auxiliaries with the citizens of Michigan, there should come forth a true understanding of the profession's program of non-profit, voluntary hospital-surgical-medical care.



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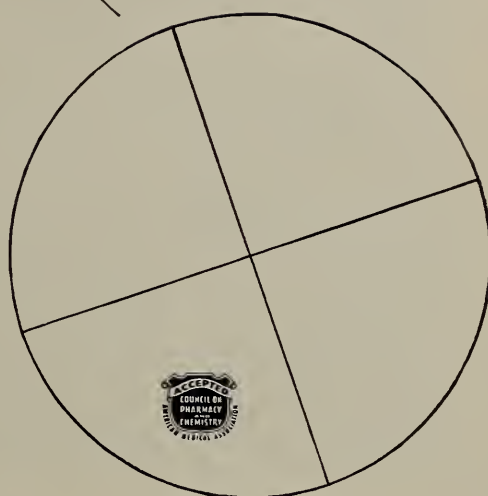
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Accompanying *prolonged pain*

When psychopathic problems develop *after childbirth*

Precipitated by *the menopause*

With debilitating or crippling *chronic organic disease*



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# PR in Practice

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## Public Education

In order better to serve the people of Michigan, a definite comprehensive program of public education has been developed by the Special Committee on Education of the Michigan State Medical Society. This program—working in conjunction with the established Public Relations Program—calls for closer contact between the State and component County Medical Societies with increased effort on the local level. To implement the activity, five full-time Public Relations Field Secretaries have been obtained and assigned to districts as follows:

### North

Grand Traverse-Leelanau-Benzie County Medical Society  
Manistee County Medical Society  
Northern Michigan Medical Society (Antrim, Charlevoix, Cheboygan, Emmet)  
Wexford-Missaukee County Medical Society  
Alpena-Alcona-Presque Isle County Medical Society  
Medical Society of North Central Counties (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin, Kalkaska)  
Chippewa-Mackinac County Medical Society  
Delta-Schoolcraft County Medical Society  
Luce County Medical Society  
Marquette-Alger County Medical Society  
Dickinson-Iron County Medical Society  
Gogebic County Medical Society  
Houghton-Baraga-Keweenaw County Medical Society  
Menominee County Medical Society  
Ontonagon County Medical Society

### West

Eaton County Medical Society  
Hillsdale County Medical Society  
Jackson County Medical Society  
Branch County Medical Society  
Calhoun County Medical Society  
St. Joseph County Medical Society  
Allegan County Medical Society  
Berrien County Medical Society  
Cass County Medical Society  
Kalamazoo County Medical Society  
Van Buren County Medical Society  
Barry County Medical Society  
Ionia-Montcalm County Medical Society  
Kent County Medical Society  
Ottawa County Medical Society  
Mason County Medical Society  
Mecosta-Osceola-Lake County Medical Society  
Muskegon County Medical Society  
Newaygo County Medical Society  
Oceana County Medical Society

### East

Huron County Medical Society  
Sanilac County Medical Society  
Lapeer County Medical Society  
St. Clair County Medical Society  
Saginaw County Medical Society  
Tuscola County Medical Society  
Bay-Arenac-Iosco County Medical Society

Lenawee County Medical Society  
Livingston County Medical Society  
Monroe County Medical Society  
Washtenaw County Medical Society  
Macomb County Medical Society  
Oakland County Medical Society  
Midland County Medical Society

### Central

Ingham County Medical Society  
Clinton County Medical Society  
Genesee County Medical Society  
Shiawassee County Medical Society  
Gratiot-Isabella-Clare County Medical Society

### Detroit

Wayne County Medical Society  
East Side  
West Side  
Down River and Dearborn

## Wayne County Medical Society to Celebrate Centennial

The year 1949 marks the 100th birthday of the WCMS, and in celebration a ceremony is planned in Detroit at the Masonic Temple on April 26. This offers an excellent opportunity for a review of the great growth in medical service both in Detroit and elsewhere. Watch for more on this.

## "Tell Me, Doctor"

The "Tell Me, Doctor" program is now being carried daily over 23 Michigan stations. Doctors of medicine can perform a valuable P.R. service by telling their patients and friends about this program and urging them to listen.

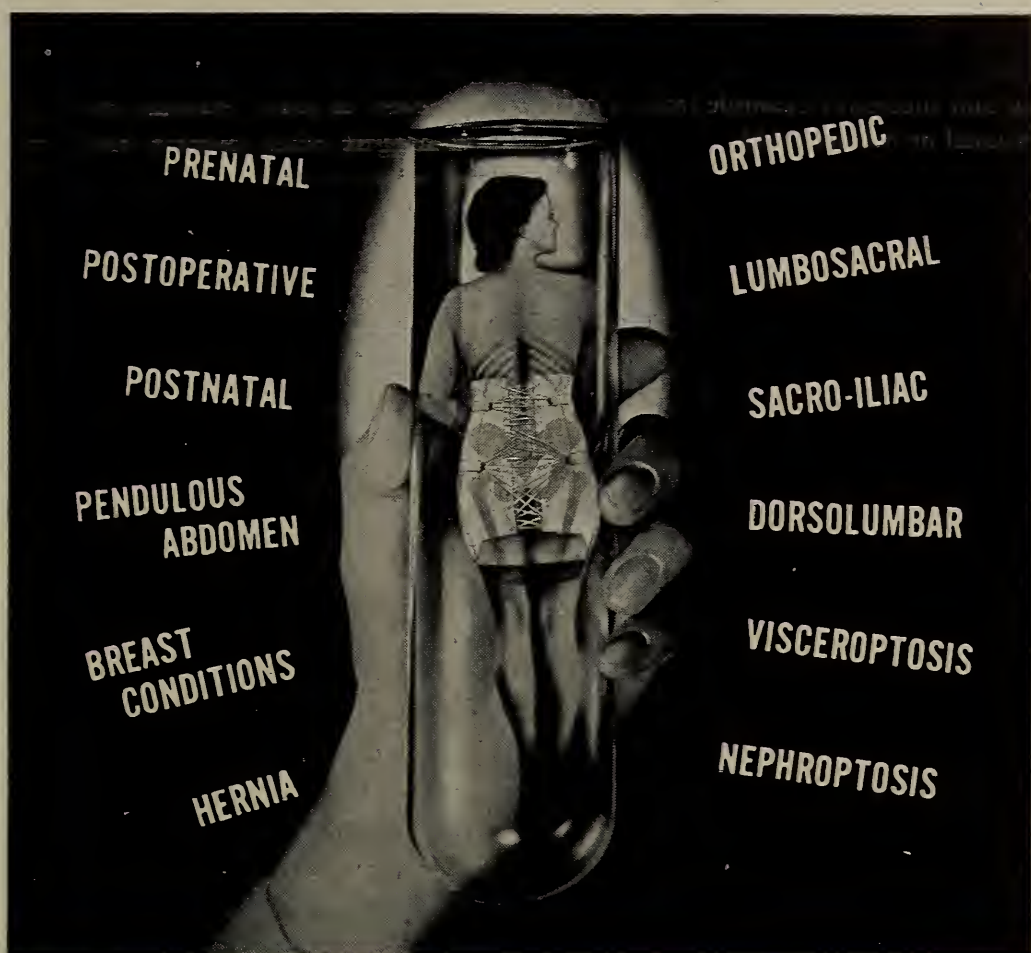
The program is in use over some sixty stations outside of Michigan, and a campaign is being carried out to place it in every state of the union by a national distributing organization.

The success of the program has been indicated by a continually increasing number of stations which have carried the program, as well as by the volume of mail reflecting public interest.

## Recognition Awarded MSMS PR Program

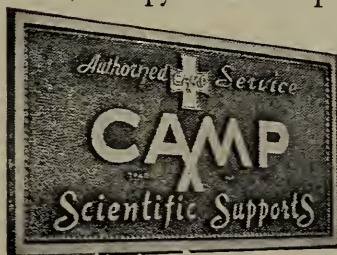
The public relations program of the Michigan State Medical Society has been selected for a case history study by the weekly *Public Relations News* published by Glenn and Denny Griswold, New York, N. Y. This top PR trade magazine devotes a portion of each issue to explaining and analyzing

(Continued on Page 162)



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## Recognition Awarded MSMS PR Program

(Continued from Page 160)

public relations activities, selecting each week an outstanding and successful example from a particular professional or business field.

## Postgraduate Clinical Institute

Ralph A. Johnson, M.D., Detroit, has accepted the chairmanship of the Press Relations Committee for the 1949 Michigan Postgraduate Clinical Institute. Other members of the committee are William Bromme, M.D., Detroit, H. F. Dibble, M.D., Detroit, and L. W. Hull, M.D., Detroit.

An excellent program has been planned, and a turn-out of over 2,000 doctors of medicine is anticipated. *All subjects* on the Institute and the Heart Day Programs will be applicable to clinical medicine. They will stress diagnosis and treatment, usable in everyday practice.

News releases concerning the Institute have been sent out, and invitations to attend have been extended to practitioners from Ohio, Indiana, Wisconsin, and Ontario, Canada.

## Requests for "Lucky Junior"

Requests for the use of the MSMS film "Lucky Junior" have been received from the Detroit Public Libraries; Los Angeles Board of Education; Newark, New Jersey, Board of Education; New York Department of State; Washington, D. C., Recreation Department; Louisiana State Medical Society; Medical Society of Virginia; Illinois State Medical Society; the Sound-Photo Equipment Company of Labbock, Texas, and others. In addition to these, numerous requests have been received for the picture in 16mm for showing before selected groups in Michigan. The outstate requests are being honored on a lease basis and the requests from Michigan are being postponed until the completion of showings of the picture in commercial theaters.

Indications of the reception given "Lucky Junior" by theater audiences are to be found in the reports from the theater managers of all of those theaters which have presented the film to date:

Favorable Audience Reaction .....	93%
No Audience Reaction .....	6%
Unfavorable Audience Reaction .....	1%
"Good" rating by Theater Managers .....	86%
No Comment by Theater Managers .....	13%
"Poor" rating by Theater Managers .....	1%

## Medical Public Relations

Our principal sins have been those of omission: the failure of individual doctors to answer calls as promptly as possible, to take night calls, or even to show enough interest in a sick patient to suggest other medical men who might be willing to make unwanted calls; and the failure of the medical profession to supply doctors for rural areas. Most of these sins of omission can be charged to the artificial shortage of medical manpower created by the excessive demands of the armed services, plus the fact that a disproportionately large number of doctors have preferred to be specialists rather than general practitioners. Among our sins of commission have been those of charging excessive fees and accepting rebates or "kick-backs."

One major weakness of the medical profession is that so few of its members manifest any active interest in its problems, except to criticize those who do take the leadership in medical organizations. The vast majority are opposed to being regimented under political control, yet make no attempt to register their opposition. For years they indulged in the complacent thought that "It can't happen here"; now only too many are taking the defeatist attitude that "There isn't anything we can do about it."—Editorial, *North Carolina Medical Journal*, December, 1948.

The American Medical Association's conference on Public Relations in November was the first formal meeting of its kind ever held by the American Medical Association. . . . The pity about this conference is that it came ten years too late. Had the proper relations been established with the general public ten years ago, the "bugaboo" of socialized medicine would not be here to plague us. . . . Headquarters is catching up with the thinking in several of the States. So important was this first conference that it is to be an annual affair at the Interim Session and will probably be expanded to a two-day program. . . . We are not prepared at this moment to discuss the advisability of the American Medical Association's assessing its members. It may be too late—we think it is ten years too late.—Editorial, *Delaware State Medical Journal*, December, 1948.

# The JOURNAL

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## The Rational Application of Sedative and Analgesic Drugs

By Stuart C. Cullen, M.D.,  
Iowa City, Iowa



ON INFINITE occasions the patients with whom the physician comes in contact, and particularly those upon whom it is necessary to perform some diagnostic or major or minor surgical procedure, are subjected to strange sights, heavy and nauseating aromas, and intriguing yet terrifying

sounds as well as discomfort. On these occasions it is desirable and possible to alleviate the mental distress and an appreciable degree of the physical distress with appropriate sedative and analgesic drugs.

If the physician is interested in the comfort of his patients as well as in their physical well-being, he can well afford to take the time necessary to administer a sedative and an analgesic drug prior to or concomitant with the diagnostic or surgical procedure. It may well be that the minimal time and effort and knowledge applied to this administration will make the difference between a procedure well done and with satisfaction to the patient and a procedure which is both harrowing to the patient and exasperating and unsatisfactory for the physician. More and more patients are learning and are expecting that they need not be exposed to medical practices of the Dark Ages in relation to relief of mental and physical discomfort.

All too often sedative and analgesic drugs are given to patients without any consideration of the pharmacologic properties of the drugs, without anything more than a cursory evaluation of the dose required, and usually because in some prior more or less similar situation the physician had seen the drug given. To obtain a consistently safe and satisfactory response to sedative and analgesic drugs, it is expedient to use the drugs according to their respective pharmacologic effects and in a dose and by a route that will give reasonable assurance of a minimum of unnecessary depression and give the desired effect promptly.

Although the drugs that are to be discussed are used as premedication for anesthesia, the factors that involve their rational application as premedicating drugs also influence their application in other situations. Attention to and retention of the basic fundamentals associated with the use of these drugs will not only result in better anesthesia but can also result in more prompt and effective control of convulsions, more adequate and less depressing control of acute pain such as that associated with renal colic, and safe and effective sedation of apprehensive patients.

The drugs to be discussed are representatives of three groups, the opiates, the belladonna derivatives and the barbiturates.

### Morphine

Morphine is the most commonly employed member of the opiates because it fulfils its functions with the least amount of unfavorable action. Morphine possesses three useful properties. These are (1) reduction of reflex irritability, (2) reduction of metabolism, and (3) analgesia. Morphine should be used only when these properties are desired. It is a poor hypnotic drug.

Presented at the eighty-third annual session of the Michigan State Medical Society, Detroit, September 22, 1948.  
From the Division of Anesthesiology, Department of Surgery, State University of Iowa College of Medicine, Iowa City, Iowa.



Morphine may be administered by any one of three routes, depending on the time available for the production of its full effect. It may be given subcutaneously, and its full effect will be secured in approximately ninety minutes. It may be given intramuscularly, and its full effect will be obtained in approximately forty-five minutes. It may also be given intravenously, and its full effect will be manifest in approximately fifteen minutes. Administration of morphine by the intravenous route is an old established custom and a safe procedure, and it is unfortunate that use of this route of administration is not more widespread. It is useful not only in premedication for emergency surgery but for relief of the acute pain of renal and gall-bladder colic, angina pectoris, et cetera. The prompt action when morphine is given intravenously forestalls the tendency, when it is given subcutaneously, to overdose the patient during the development of the effect of the drug. In anesthetic practice, intravenous injection prevents the simultaneous development of the cumulative effect of anesthetic drug and morphine depression at the termination of the anesthesia. Too many patients' lives are seriously endangered and lost through the following practice:

Morphine is given subcutaneously a half-hour or less prior to anesthesia. The anesthesia lasts approximately an hour, and at its conclusion the patient has the maximal effect of both the anesthetic agent and the morphine. He is returned to the ward or room with respiratory and circulatory depression; obstruction develops, followed by asphyxia, and he dies.

Had the morphine been given in a manner which permitted the development of its total action before induction of the anesthesia, its effect would be wearing off during the anesthesia and there would be minimal combined depression at the conclusion of the anesthesia.

The same dose of morphine is used regardless of the mode of administration, although it is possible to gauge the dose most accurately with the intravenous route because the drug can be given slowly and stopped when the desired effect is obtained. It is usually advisable to dilute the morphine with 3 to 5 c.c. of saline when it is to be given intravenously. A 25-gauge needle is preferable because administration of the drug is then deliberately slow and a natural tendency to rapid injection is overcome. Two or three minutes should be taken for the injection. After the

morphine has been made up in the usual form for subcutaneous administration, it may be administered intravenously by injecting a portion of the dose, aspirating blood, reinjecting another portion, aspirating again, and so on, until the whole dose has been injected. This process dilutes the morphine concentration and lengthens injection time.

Occasionally a patient complains of occipital headache during intravenous injection of morphine. It is advisable then to slow the injection still more or discontinue it. No other unusual reaction can be anticipated from the use of morphine intravenously.

Unfavorable reactions to morphine are due most often to overdosage, which causes respiratory obstruction, depression and asphyxia. It is difficult to cause death with morphine if the patient is kept properly oxygenated. The chief cause of the hypoxia in morphine depression is not the reduction in respiratory rate but rather the respiratory obstruction that develops as the patient becomes narcotized and the jaw and tongue relax. If a patient's airway remains, or is kept, unobstructed, he may remain quite well oxygenated even though he is breathing only four or five times a minute. The respiration of morphine depression is characterized by slow but excessively deep breaths (in the unobstructed patient), and the minute volume exchange, although reduced, is often adequate. If the morphine depression is severe and prolonged, there may also be circulatory depression.

The treatment of morphine depression is aimed essentially at efficient oxygenation of the patient. The first step in treatment is establishment of the airway. Treatment of morphine depression or any other drug depression will be frequently unsuccessful unless prompt and effective care is taken of the airway. After establishment of the airway, oxygen is given. Artificial respiration may be required to accomplish satisfactory oxygenation. It is not necessary nor rational to get the patient up and walk him about. Nor is it necessary or beneficial constantly to belabor and mutilate the patient with painful stimuli.

The use of analeptics such as coramine, metrazol, caffeine sodiobenzoate, alphanalobeline and benzedrine is of little value in the treatment of mild morphine depression and of no value in the treatment of severe morphine depression. It is true that the analeptics are capable of increasing the respiratory rate and perhaps effecting a slight in-

crease in the minute volume exchange, but these benefits are temporary and do not result in permanent effective oxygenation. The analeptics may be used, *but only* after a patent airway has been established and adequate oxygenation insured by other more suitable means. They are useful sometimes in bringing patients from a mild state of mental depression to full consciousness. It is dangerous practice to employ analeptics as the sole measure in the treatment of morphine depression in the fallacious belief that one is employing all the treatment possible under the circumstances. The injudicious use of analeptics in the hypoxic patient may result in convulsions.

Another unfavorable reaction to morphine is that resulting from a true idiosyncrasy. This reaction is characterized by nausea and emesis and violent and persistent retching. Many patients vomit after receiving morphine. If the nausea and emesis are relatively mild and of short duration, they cannot be considered a sign of a true idiosyncrasy and there is no need for avoiding the repeated use of morphine in that patient. In a patient who exhibits, or gives a history of, violent and persistent nausea, emesis and retching, these signs can be interpreted as indicative of a true idiosyncrasy and it will be advisable to seek a substitute for morphine. There is little effective treatment for this type of reaction and no danger associated with it. Analeptics, particularly metrazol, may be of some value in controlling the reaction.

There are two other reactions to morphine that occur infrequently. Morphine is a smooth muscle stimulant, and in a few susceptible individuals there is excessive contraction of the sphincter of Oddi, causing pain which is indistinguishable from acute gall-bladder colic. This can be controlled fairly readily with spasmolytics such as atropine and scopolamine. In a few rare individuals who seem to be robust and have an active metabolism and normal reflex irritability, there is abnormal respiratory depression with ordinary therapeutic doses. These patients are treated as outlined earlier. It is important that they be told of their unusual susceptibility to avoid repetition of depression.

There are a number of substitutes for morphine that can be used with success and to advantage in patients who have a true idiosyncrasy to morphine. These are pantopon, dilaudid, demerol and methadon.

Pantopon is a composite of all the alkaloids of opium and contains morphine. It is not too satisfactory a substitute for morphine. Its popularity as a substitute has probably been enhanced by its use in patients who do not have a true idiosyncrasy and who experience less nausea and emesis than with morphine by reason of the relatively minimal amount of morphine present in pantopon.

Dilaudid is a true substitute for morphine. It is a synthetic drug and causes much less nausea and emesis than morphine. Its chief disadvantage is its tendency to produce pronounced respiratory depression in doses necessary to effect satisfactory analgesia and reduction of reflex irritability and metabolism.

Demerol is a synthetic substitute for morphine which produces a minimal amount of nausea and emesis and very little respiratory depression and is also capable of exerting an atropine-like effect. Its effect in lowering reflex irritability and metabolism is not established, but it is probably not as active in this regard as morphine. It is a satisfactory substitute for morphine.

Methadon (An-148, amidon, dolophine) is a new synthetic drug. In equivalent doses it is two to three times as analgesic as morphine. It can be used as a substitute for morphine in patients who need pain relief with a minimum of nausea and emesis and respiratory depression. However, it seems incapable of producing any significant psychic depression, and in many patients it is less satisfactory as an analgesic because it fails to produce euphoria. On the other hand, it apparently is capable of effecting addiction.

### Belladonna Group

The drugs of the belladonna group that are used most commonly are atropine and scopolamine. Hyoscine is the same as scopolamine.

The properties which make these drugs useful are (1) depression of mucus secretions, (2) depression of reflexes mediated through the vagus, (3) counterbalancing of the respiratory depression of morphine, and (4) psychic sedation.

These drugs may be administered by any of the three routes employed for morphine, namely, subcutaneously, intramuscularly and intravenously. As with morphine, it is desirable to have the full effect of these drugs developed prior to the induction of the anesthesia. Their maximal effect is



obtained in approximately fifteen minutes when given subcutaneously and almost immediately when given intramuscularly or intravenously. As a rule, however, they are given at the same time as morphine to eliminate the necessity for two hypodermic or intravenous injections. They may be combined in the same syringe with morphine.

Scopolamine is used in preference to atropine in all patients except those under five years of age and those over seventy-five. Atropine is used in these two age groups because the dose of scopolamine required to secure the optimal degree of depression of mucus secretion and vagal transmission is prone to induce unfavorable reactions. In the age group between five and seventy-five years, scopolamine is used safely and efficaciously without untoward reactions. It has three advantages over atropine: (1) it is more effective in counterbalancing the respiratory depression of morphine, (2) it contributes a satisfying measure of psychic sedation and amnesia, and (3) it inhibits much of the nausea associated with the administration of morphine. It is possible to give large doses of morphine ( $1\frac{1}{2}$ -2 gr.; 0.09-0.12 gm.) without undue respiratory depression, provided the morphine is given with scopolamine. Psychic sedation from scopolamine is characterized by a feeling of euphoria and complete lack of concern over the proceedings. In addition, partial, and at times complete, amnesia can be secured. This is advantageous in all patients but is particularly beneficial in children and apprehensive patients. The coincident administration of morphine and scopolamine eliminates all but a minor degree of nausea and emesis frequently associated with morphine in those patients who do not have a true idiosyncrasy. This property of scopolamine can be used to advantage in the postoperative period and at other times when morphine is necessary and provokes gastric distress of short duration.

Unfavorable reactions to atropine are characterized by a flushed face, circumoral pallor, tachycardia, mydriasis and anhidrosis. If the reaction is severe in adults or if the reaction occurs in children, there may be an elevation of the body temperature. Severe reactions, which are rare, may be associated with mental aberration. The flushed face, circumoral pallor, tachycardia, anhidrosis and mild fever are not dangerous. These symptoms occur frequently in children and do not constitute a contraindication to anesthesia or sur-

gery, nor do they require treatment. Unless the fever is excessively high, no treatment for an atropine reaction is necessary. Symptomatic treatment with cold baths, ice, et cetera, is indicated for patients with high fever. Mental disorientation is usually associated with the high fever and is treated in the same manner, perhaps with the addition of hypnotic drugs and oxygen.

Unfavorable reactions to scopolamine are characterized by the same signs and symptoms as those of atropine poisoning. In addition, mental excitement progressing to delirium may develop. This infrequent reaction can be treated successfully with apomorphine in subemetic doses ( $1/40$  gr.; 0.0015 gm.). The apomorphine may be repeated at thirty-minute intervals until the delirium is satisfactorily controlled.

Unfavorable reactions of even mild degree are a rarity when scopolamine is used properly. The advantages to be gained by the use of scopolamine far outweigh any slight disadvantage it may have. Comparative observation of the patients given atropine and scopolamine will soon convince the skeptic of the benefits of scopolamine.

### Barbiturates

The short-acting barbiturates are most often employed because prompt onset of action and quick recovery are usually desired. The two barbiturates commonly used are nembutal and seconal.

The properties for which these drugs are used are (1) hypnosis and (2) protection against the convulsive manifestations of a reaction to cocaine and similar drugs. It is well to remember that the barbiturates are poor agents for analgesia and should not be used for that purpose. They should be used with caution in patients with pain, because the barbiturates repress the inhibitions and often provoke disorientation.

The short-acting barbiturates are usually given by mouth, although preparations are available which can be given parenterally. There is a growing tendency to use nembutal intravenously for premedication and sedation. The use of the barbiturate intravenously avoids the unreliable effect associated with the inconstant absorption of the drug from the stomach and intestine. Intravenous administration permits the development of more exact degrees of depression. The maximal effect from nembutal given intravenously is obtained in approximately three minutes. The maxi-

mal effect is obtained in approximately twenty minutes when the drug is given by mouth. It is important to remember that the barbiturates are absorbed best from the alkaline medium of the small intestine. This fact makes it advisable to give the barbiturate a half-hour before the administration of morphine when the two drugs are used together. The morphine relaxes the stomach and increases the tone of the pylorus, delaying the passage of the capsule of barbiturate from stomach to small intestine. The effect of the short-acting barbiturates lasts approximately four hours.

Unfavorable reactions to the barbiturates are due most often to overdosage, causing respiratory depression, obstruction and asphyxia. They often cause circulatory depression. The respiratory depression is characterized by shallow respirations at a normal or slightly increased rate, in contrast with the slow deep breathing of morphine depression. The treatment for barbiturate depression is essentially the same as that for morphine depression. The airway must be established, the patient must be oxygenated and the circulatory depression relieved. The analeptic drugs have little or no value unless the depression is minimal, because the analeptics effect only a brief stimulation and the patient lapses again into the depression.

Occasionally some individuals manifest an allergic reaction to the barbiturates. These are usually characterized by cutaneous lesions. Use of barbiturates should be avoided in patients giving a history of such a reaction.

A few people become disoriented under the influence of the barbiturates, particularly patients over seventy years of age. The incidence of such reactions is low, however, and close scrutiny of a history of this type of reaction usually reveals that the barbiturates were used in the presence of pain, in excessive doses or in some other improper fashion.

The determination of dosage depends on the patient's level of reflex irritability. This level of reflex irritability parallels fairly constantly the metabolic activity of the individual. The metabolism of the individual varies with his age. The most important single factor influencing the estimation of the level of reflex irritability, and therefore the tolerance to depressant drugs, is the patient's age. If any one asked to prescribe a depressant drug were limited to one piece of information about the patient, the most valuable item would be the age. From a given value at birth, the metabolic activity

increases sharply to five years of age, when it recedes slightly, to rise again at puberty, after which it gradually declines until old age. This delineates the reason for the frequent underdosage of children and the overdosage of the aged.

Basic levels of reflex irritability and metabolism are increased by fever, pain, emotional disturbances and specific hypermetabolic states (hyperthyroidism). Patients with such complications have a higher tolerance for depressant drugs and require larger doses than other patients.

Basic levels of reflex irritability and metabolism are decreased in certain races (Negroes, Orientals) and by debilitating disease, asthenia and specific hypometabolic states (hypothyroidism). These persons tolerate depressant drugs less well and require smaller doses than the average patient.

Morphine and scopolamine are used in the ratio of twenty-five parts of morphine to one part of scopolamine. In this ratio, the beneficial effects of both drugs are enhanced and the undesirable effects minimized. Optimal analgesia and reduction of reflex irritability and metabolism are secured with the morphine with minimal respiratory depression and nausea. Effective drying of secretions, psychic sedation and amnesia are obtained with the scopolamine with lessened discomfort to the patient from a dry mouth and rare toxic reactions.

In practice, this ratio works out in the following manner:

Morphine  $\frac{1}{4}$  gr. (0.015 gm.) and scopolamine 1/100 gr. (0.0006 gm.)

Morphine  $\frac{1}{6}$  gr. (0.01 gm.) and scopolamine 1/150 gr. (0.00045 gm.)

Morphine  $\frac{1}{8}$  gr. (0.008 gm.) and scopolamine 1/200 gr. (0.0003 gm.)

Although there has been some emphasis on the application of the foregoing pharmacologic properties of the drugs in anesthetic practice, it is reiterated that every physician in his every-day practice can use this same knowledge to advantage in other areas.

==MSMS==

In the anesthetized patient the vital capacity is reduced by some 15 per cent, with some basal pulmonary atelectasis, in the Trendelenburg, head-down tilt, gall-bladder bridge, lithotomy and lateral kidney positions.



# Sodium and Water Excretion in Pregnant Women

By Willis E. Brown, M.D., and  
J. T. Bradbury, Sc.D.  
Iowa City, Iowa



WILLIS E. BROWN

**T**OXEMIA of pregnancy is a clinical syndrome of disordered physiology characterized by edema, hypertension, and albuminuria. Since its etiology is unknown, therapeutic schedules are designed to alleviate the more obvious symptoms. Many investigators and clinicians have focused their

attention on the hypertension and have instituted treatment to ameliorate this condition. Others have concerned themselves with certain aspects of albumin and protein metabolism. Water retention and elimination have been emphasized, and manipulation in fluid intake has become an integral part of the clinical regimen (albeit some force fluids and others limit them). More recently sodium retention has been investigated in its relationship to edema, and the limitation of salt intake has become an integral part of the clinical management of toxemia of pregnancy.

The schedules of treatment generally in vogue today include bed rest, sedation, and spasmolytic agents to lower the blood pressure; limitation of salt, hydration or dehydration, combined with the administration of some diuretic agent to reduce the edema; and a high protein diet to combat the loss of protein by albuminuria.

Interest in the problem of edema has stimulated investigators to explore this symptom of the clinical syndrome. Edema is one of the most common signs of toxemia of pregnancy, but it is not clear whether the accumulation of fluid represents a disorder of water, protein, or sodium metabolism. Investigations were undertaken to study the absorption and excretion of sodium and water in women with normal and toxemic pregnancies.

The patients used in this study were hospitalized

From the Department of Obstetrics and Gynecology, University of Iowa College of Medicine, Iowa City, Iowa.

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on a special ward in the obstetric department. Their diets were prepared by the department of nutrition, and the caloric values and sodium contents calculated from tables. These diets have been varied from low values of 1 to 1.5 grams of sodium chloride (0.4 to 0.6 grams of sodium) per twenty-four hours to normal values of 4 to 6 grams of sodium chloride per twenty-four hours; higher intakes of 10 to 15 grams were achieved by giving the patients additional salt. The fluid intake was recorded daily, and the studies were continued over several weeks. Each patient was given a controlled sodium intake for a minimum of three and usually five days prior to establishment of a treatment schedule. The experimental schedules were generally arranged to correspond with the usual clinical therapeutic plans employed in this hospital.

Urine was collected daily as twenty-four-hour specimens and the volume and sodium content of each was determined. The average values for the specimens three days prior to and three days following treatment were used as controls and were compared with the urine volume and sodium value obtained on the day of the test.

The following substances were selected and studied for their effect on the excretion of water and sodium:

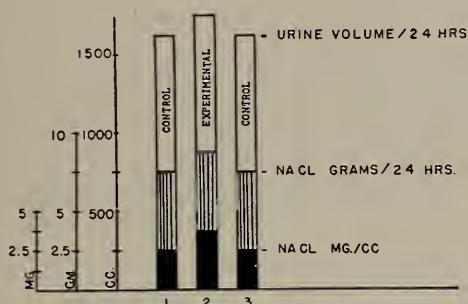
1. Water (by mouth): given in quantities of 2,000 to 6,000 c.c. daily. A few patients received this amount of water in two to four hours.
2. Dextrose (intravenously): given as 5 per cent, 10 per cent, 25 per cent, and 50 per cent solutions in amounts varying from 400 to 4,000 c.c. depending upon the concentration.
3. Aminophylline (intravenously): given in doses ranging from 120 mg. to 1,500 mg. daily (1 gr. twice daily to 7½ gr. three times daily).
4. Mercurial diuretics: salyrgan (100 mg./c.c.); salyrgantheophylline and mercuhydrin (mercurial 100 mg./c.c. plus theophylline 48 mg./c.c.) given intravenously in doses ranging from 2 to 4 c.c.
5. Ammonium chloride (by mouth and intravenously): given in amounts varying from 8 to 16 grams per twenty-four hours.

It was of interest to learn whether any of these diuretic substances could also be shown to cause an augmented sodium excretion. Such an increase in sodium loss would represent the mobilization and excretion of extracellular (edema) fluid, which might be of advantage in the clinical management of patients.

A new method of sodium determination devel-

oped in this laboratory has greatly facilitated the studies of sodium exchange. Previous workers generally have employed a chloride determination rather than direct sodium measurement. Altera-

a lag of three to five days before sodium excretion increased to the level of intake after the extra salt was added, and again for it to decrease after it was discontinued. This exemplifies the necessity



Key to illustrations:

- (1) Pre-treatment control (one day or average of three days).
- (2) Day of treatment.
- (3) Post-treatment control (one day or average of three days).

The figures illustrating the text are constructed in the same way as this sample graph.

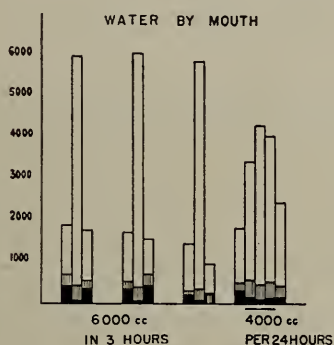


Fig. 2. Graphic representation of the excretion of urine and sodium when fluids were given by mouth, 6,000 c.c. for one day, and 4,000 c.c. for three successive days.

tions in fluid and sodium intake and output have been studied with reference to the various diuretic agents and have been reported in detail elsewhere.

### Effect of Dietary Sodium on Urinary Sodium Excretion

Patients entering the hospital had been on a self-selected diet. Urinary sodium in these women ranged from 4 to 10 grams of sodium chloride per twenty-four hours. When placed at bed rest and given a general hospital diet containing a standard amount of sodium chloride (4 to 6 grams) their urinary sodium stabilized at this level after three to five days.

The time required for urinary sodium to stabilize after alteration in salt intake was studied. The effect of adding 10 grams of salt daily to a patient's diet is charted in Figure 1. There was

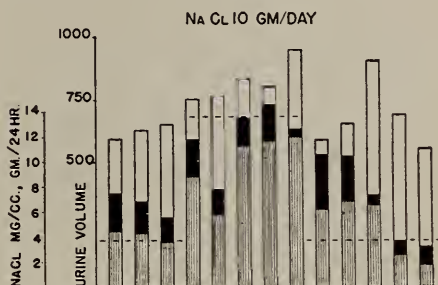


Fig. 1. Graphic representation of the daily excretion of urine and sodium when the salt in the diet (3.8 grams) was augmented by giving an additional 10 grams a day for five days. Broken line represents level of dietary salt.

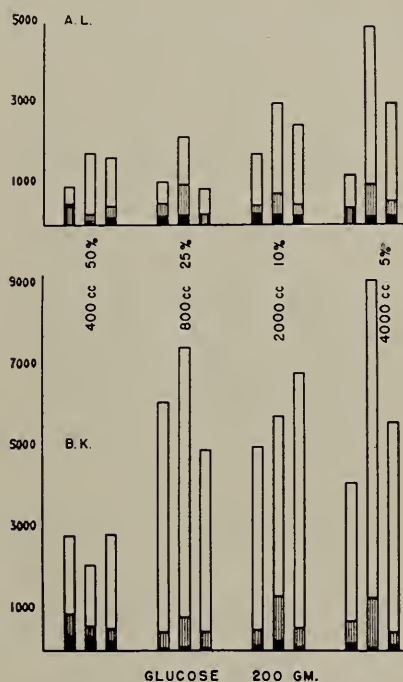


Fig. 3. Graphic representation of the excretion of urine and sodium in two patients who were given intravenous solutions containing 200 grams of glucose (dextrose). The interval between these observations was five to seven days. The polydipsia and polyuria of B. K. lasted for about five weeks, but the effect of infusions of dextrose was still the same as in other patients.

of stabilizing sodium intake for several days before and after a test period in order to evaluate the significance of changes in sodium excretion due to any diuretic agent.

### Effect of Forcing Fluids on Urinary Sodium

Forcing fluids orally is a commonly employed clinical practice. Patients on a standard sodium diet were given 4,000 to 6,000 c.c. of water on



one day or for several days. In some subjects 6,000 c.c. was ingested in two to three hours. The effect of forcing fluids on sodium excretion is illustrated in Figure 2. It is apparent that urinary output

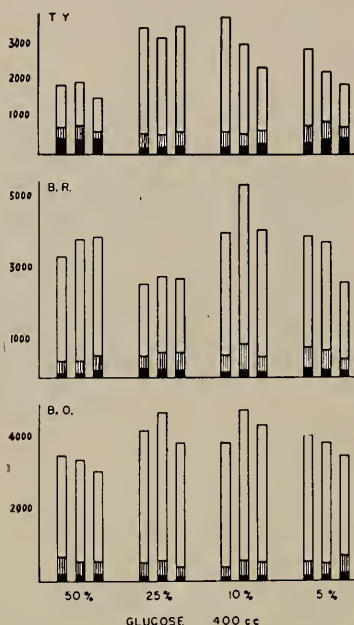


Fig. 4. Graphic representation of the excretion of urine and sodium when patients were given 400 c.c. of glucose (dextrose) solutions intravenously. The interval between the injections in these three patients varied from five to seven days. There is no demonstrable effect on urine or sodium output even though the dose of dextrose varied from 20 to 200 grams.

can be greatly increased by the augmented fluid intake, but the excretion of sodium was slightly decreased during the day of forced fluid. Not only was the concentration of sodium per liter reduced, but the twenty-four-hour sodium excretion was also diminished. It made little difference whether the fluid was given in two to three hours or over the twenty-four-hour period. Other investigators have previously reported a decrease in chloride (presumably sodium chloride) excretion by forcing fluids.

To study the effect of the route of administration, 2,000 to 4,000 c.c. of dextrose solution was given by vein. In these patients, there was also a slight decrease in urinary sodium concentration but the greatly increased urine volume produced a slight increase in the total sodium excreted in twenty-four hours (Fig. 3). There apparently was a difference in the amount of sodium excreted when the fluids were given by mouth or by vein.

### Effect of Intravenous Dextrose on Sodium Excretion

The effect of giving intravenous dextrose solution on sodium excretion and water elimination was

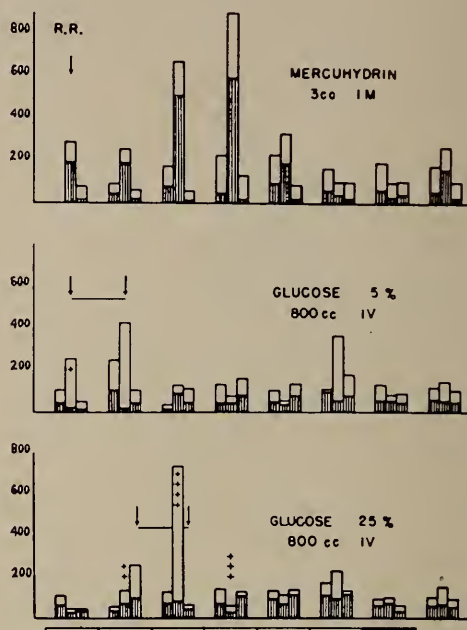


Fig. 5. Graphic representation of the excretion of urine and sodium for two-hour intervals during the day when 5 per cent or 25 per cent glucose (dextrose) was given intravenously. The arrows indicate the duration of the infusion, about two hours. The overnight specimens were pooled and the two-hour average output is plotted over the wide bar in the base line. The total output for the twenty-four hours is also plotted as a two-hour average. The mercurydrin is included for contrast. Each three-column group represents the same two-hour interval in the day on three successive days. The plus signs indicate glycosuria.

also determined. Two hundred grams of dextrose were given in four to six hours intravenously in 4,000 c.c. (5 per cent), in 2,000 c.c. (10 per cent), in 800 c.c. (25 per cent) and in 400 c.c. (50 per cent) of distilled water, and the results are illustrated in Figure 3. The amount of dextrose was constant, but the urinary sodium excretion tended to increase with the volume of fluid used to carry the dextrose.

The experiment was then reversed by injecting a constant volume while varying the amount of dextrose. In a period of two to four hours the subjects were given 400 c.c. of each concentration of dextrose; 5 per cent (20 gm.), 10 per cent (40 gm.), 25 per cent (100 gm.), and 50 per cent (200 gm.) (Fig. 4). Under these circumstances, no alteration in urinary volume or sodium excretion was observed.

Thus it appeared that the addition of dextrose to intravenous infusions did not alter the out-

put of either urine or sodium. These data (Figs. 3 and 4) suggested that it was the fluid volume rather than the concentration of dextrose in the infusion which affected urine and sodium excretion.

Since the diuretic effect of a crystalloid is transitory, similar studies were undertaken to ascertain whether an initial diuretic effect had been missed in the total twenty-four-hour samples. The patients' schedules were arranged so that two-hour

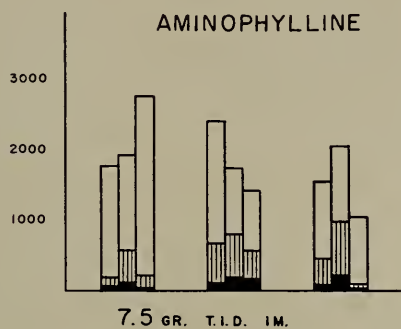


Fig. 6. Graphic representation of the excretion of urine and sodium when aminophylline (7.5 grains three times daily—1,500 mg.) was given intramuscularly.

fractional specimens of urine were collected by an indwelling urethral catheter. This procedure was continued for three successive days. In each test, 800 c.c. of 5 per cent or 25 per cent dextrose, respectively, were given to each patient on the second day in a two-hour period.

Figure 5 illustrates the results in one patient so studied. With both hypotonic and hypertonic solutions, there was an increase in urine volume during the interval of infusion, but in no case did the urine output equal the amount of fluid injected. In the fractional specimens both the sodium content and concentration decreased, but the twenty-four-hour urine output was no greater after hypotonic than after the hypertonic solution. Thus the addition of dextrose to intravenous fluids does not seem to augment the diuretic effect of the water which carries it.

The administration of 800 c.c. of 25 per cent dextrose was followed by a diminished urine and sodium excretion (Fig. 5). The oliguric phase which follows the administration of a hypertonic solution has been shown to be due to a release of the antidiuretic hormone from the posterior pituitary. This antidiuretic effect of hypertonic solutions detracts from their use as diuretic agents.

### Effect of Aminophylline on Sodium Excretion

Xanthine compounds have been used alone and in combination with the mercurials as diuretic agents. The xanthine aminophylline was given in-

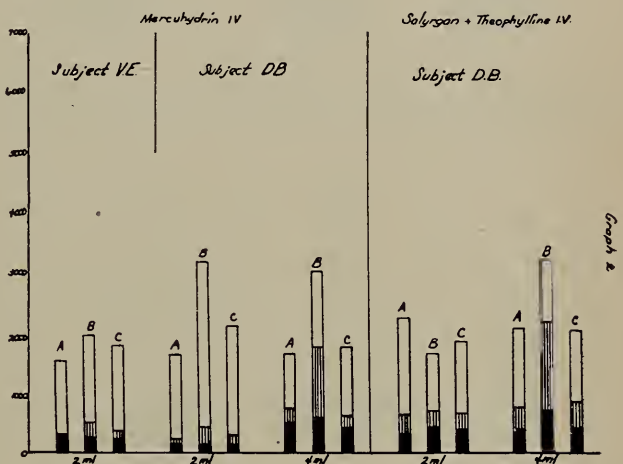
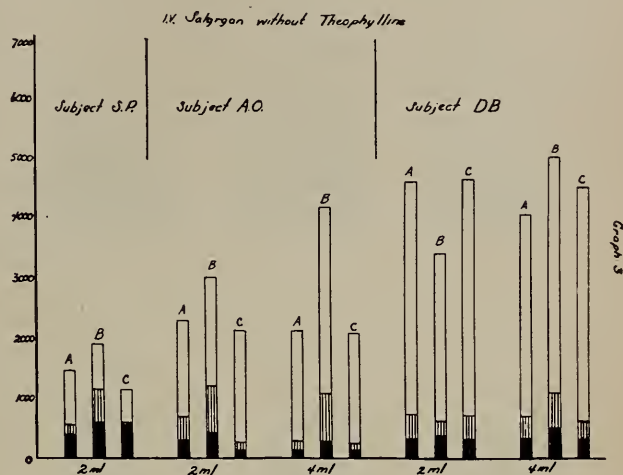


Fig. 7 (above) Graphic representation of the excretion of urine and sodium when salyrgan was administered in doses of 2 and 4 c.c. (ml.).

Fig. 8. (below) Graphic representation of the excretion of urine and sodium when mercurhydrin or salyrgan-theophylline was given in doses of 2 and 4 c.c. (ml.) (mercurial 200-400 mg. with theophylline 100-200 mg.).

travenously in doses ranging from 2 to 22 grains (0.13 to 1.5 gm.) daily. The smaller doses had no demonstrable effect on the patient, the urinary volume or the sodium excretion. The larger doses (22 gr. or 1.5 gm.) frequently caused vomiting even when administered intravenously; thus the vomiting appeared to be of central origin. The effect of aminophylline is illustrated in Figure 6. Despite the loss of sodium intake due to vomiting there was an increase in urinary sodium, which is obtained primarily by an increased sodium con-



centration in the urine. These and other studies suggest that sodium and water excretion can be modified independently of each other.

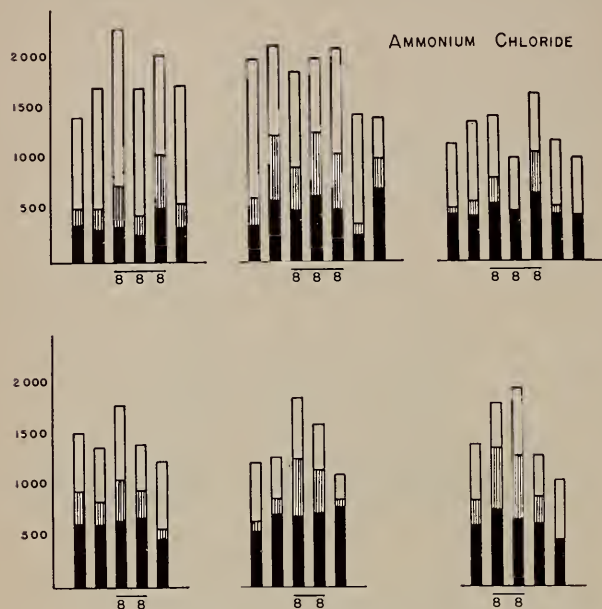


Fig. 9. Graphic representation of the excretion of urine and sodium when 8 grams of ammonium chloride was given for three days (upper row of three patients) and given for two days (lower row).

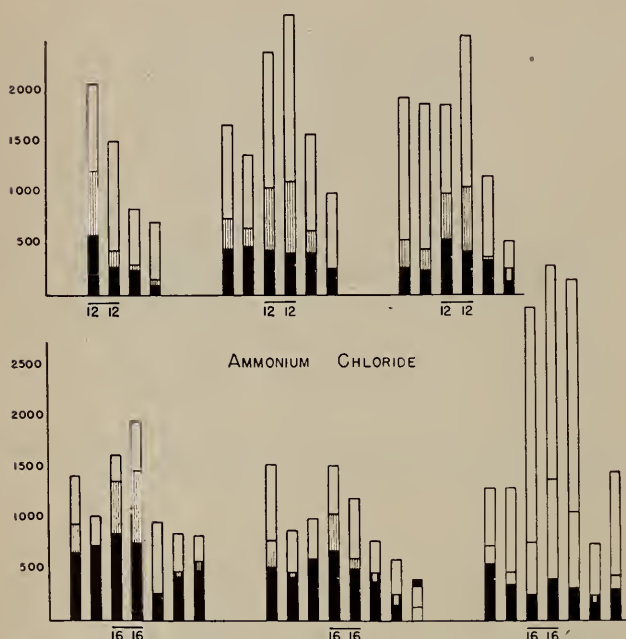


Fig. 10. Graphic representation of the excretion of urine and sodium when 12 or 16 grams of ammonium chloride was given for two days.

#### Effect of Mercurials on Sodium Excretion

Salyrgan was injected intravenously into subjects at 7:00 or 8:00 a.m. in doses ranging from 2 to 4 c.c. (200 to 400 mg.). This mercurial caused a marked increase in urinary sodium and

volume. The increased sodium output is due largely to an increased concentration in the urine (Figs. 7 and 8). The increase in sodium excretion varied with the dosage of mercurial, 2 c.c. frequently being ineffective while 3 or 4 c.c. was consistently effective in increasing the urinary volume and total sodium excretion.

On the day following this marked output of sodium, there was a transient retention of sodium as manifested by a sharp drop in daily urinary sodium output.

The effect of the mercurial diuretic appears within an hour and increases over a period of seven to eight hours (Fig. 5). In this case, the amount of sodium excreted in the fourth two-hour interval exceeded the total excretion of the preceding control day. On the basis of these observations, it appears that the mercurial compounds are most effective in mobilizing sodium and that the increased sodium excretion is obtained by an increase in both urinary sodium concentration and urinary volume.

#### Effect of Ammonium Chloride on Sodium Excretion

Ammonium chloride was administered orally in plain gelatin capsules in doses ranging from 8.0 to 16.0 grams per day over a period of two to four days (Figs. 9, 10, and 11). Eight grams of ammonium chloride caused a slight increase in both urinary volume and sodium excretion, while 12.0 grams daily produced a significant increase. The increased sodium excretion was obtained mainly by a larger urine volume rather than by an increased sodium concentration. Sixteen grams of ammonium chloride had an inconsistent effect, probably because of interfering vomiting. A dosage of 12 grams per day for one or two days appears to provide the maximal mobilization of sodium; higher doses and prolonged treatment had little additional effect, and in some there was a decrease (Fig. 10).

It thus appears that ammonium chloride administration can increase urinary sodium excretion, that this increase is of short duration and may not be maintained even with the continued administration of the drug. The increase in sodium excretion is associated with an increase in urinary volume rather than by increased sodium concentration. Twelve grams of ammonium chloride seems to be a satisfactory daily dose.

## Effect of Morphine on Urinary Sodium Excretion

A series of patients has been studied to determine the effect of morphine on urine and sodium excretion. The experimental method was changed to give these subjects a fixed volume of fluids

## Sodium and Water Excretion in Toxemic Pregnancies

Because of the exigencies of clinical management and the constantly changing status of patients with toxemia, it is impossible to set up well-controlled

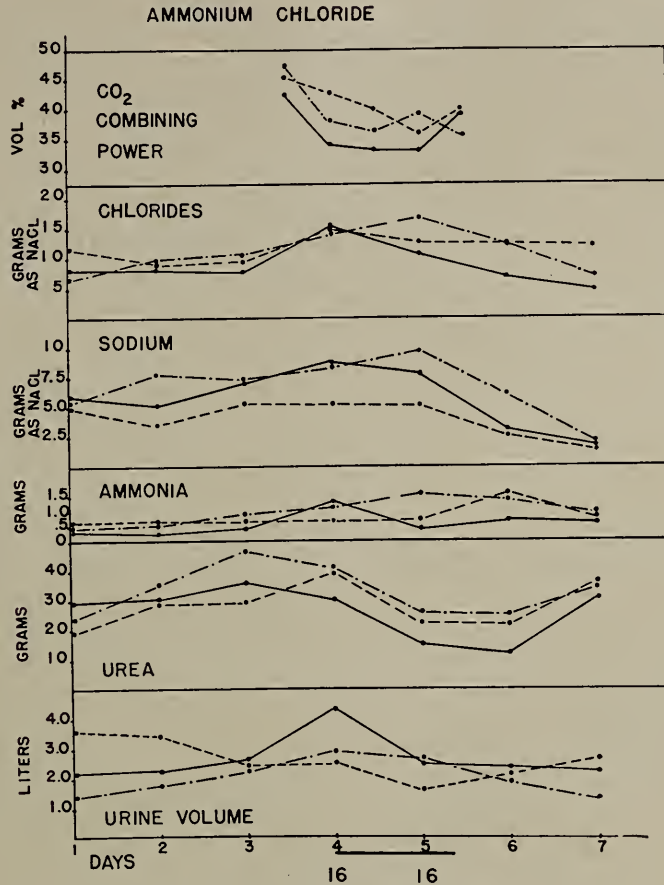


Fig. 11. Variations in urinary constituents and blood carbon dioxide combining power when 16 grams of ammonium chloride was given to three patients.

either as intravenous isotonic dextrose solution or as water by mouth. An indwelling catheter was placed in the bladder and hourly urine specimens collected. The above schedule was designed to furnish a base line of hourly urinary excretion; on experimental days, morphine, grains one-fourth (16 mg.), was administered at the onset of the fluid administration. Figure 12 illustrates the anti-diuretic effect of morphine. The urine specimens obtained under morphine are of low specific gravity and show no appreciable change in concentration of sodium. The total twenty-four-hour output is not significantly altered. Incomplete studies on a few other analgesic agents suggest they may vary in the depression of urine output and some of them may prevent the normal response to intravenous fluids.

experiments. The effect of these diuretic agents has been studied on patients with moderately severe toxemia and eclampsia. The results suggest that the toxemia patient responds in a manner similar to the normal pregnant woman. A group of toxemic patients were given 10 to 15 grams of ammonium chloride in 5 per cent dextrose intravenously. The resulting low carbon dioxide combining power was associated with a weight loss of 2 to 5 pounds per day (Fig. 13). In some instances an oliguria or anuria which had failed to respond to fluids has been overcome following the use of mercurial and aminophylline. Comatose oliguric patients have responded to the intravenous injection of ammonium chloride and the intramuscular injection of aminophylline, by



the excretion of urine containing a fairly high concentration of sodium.

agents in the clinical management of this disease. However, these few observations suggest that wom-

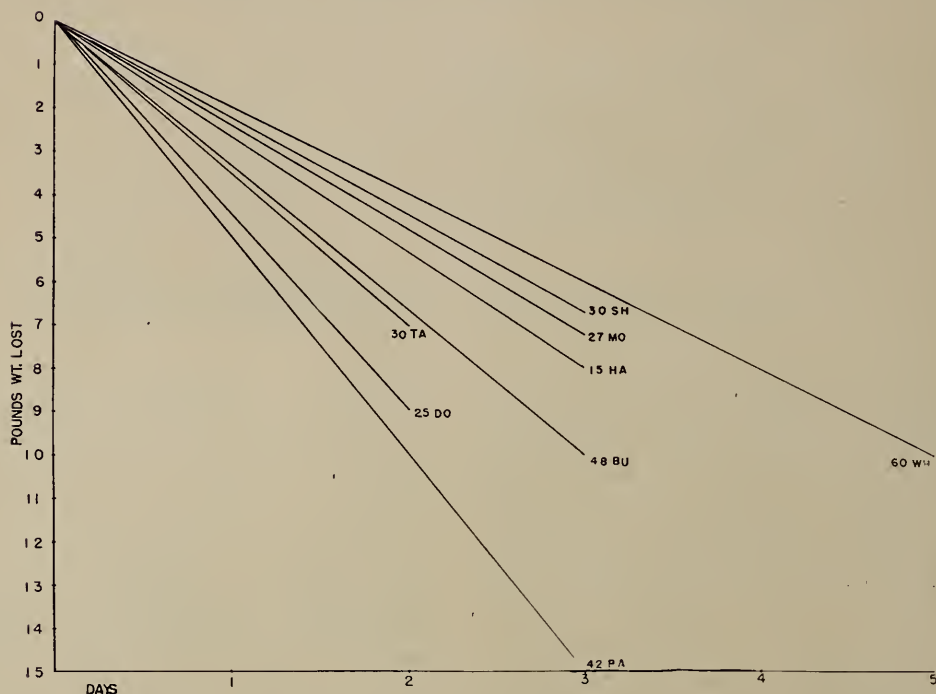
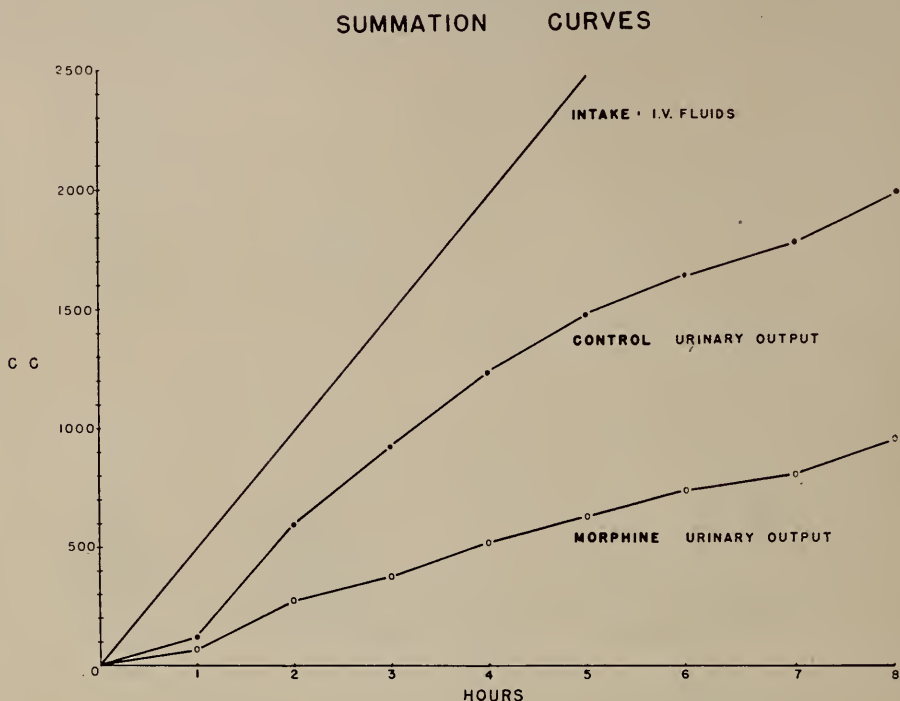


Fig. 12. (above) Curves showing the urine output during the infusion of 2,400 c.c. of 5 per cent dextrose. These are averages obtained from observations on nine patients who received the intravenous fluids on two separate days, with 0.25 grain of morphine being given on one of these days.

Fig. 13. (below) Graph showing weight loss in eight toxemic patients given 10 to 15 grams per day of ammonium chloride intravenously in 5 per cent dextrose. The figures by the lines represent carbon dioxide combining power and the patient's initials.

Sufficient studies have not been made on toxemic women to indicate the effectiveness of these-

en with normal and toxemic pregnancies respond in a similar manner to diuretic agents. Further

studies of large groups of cases will be necessary to establish the conditions under which diuretic agents would be valuable.

### Discussion

The treatment of edema holds an important place in the clinical management of toxemia. Physiologists are undecided whether the major cause of the edema is a disorder of sodium or of water metabolism. This study has attempted to explore the role of diuretic agents in water and sodium excretion in pregnancy.

It appears that the term "diuretic" has been very loosely used. If one injects 1,000 c.c. of fluid and recovers 500 c.c. of urine, this is hardly to be considered as a diuretic effect. A diuretic agent should cause the elimination of more water than is administered during the treatment interval. Furthermore, an increased loss of sodium would be evidence of elimination of extracellular (edema) fluid. A large increase in fluid intake will increase urinary volume but some fluid apparently is stored in the extracellular space. By contrast, certain agents such as the mercurials and the xanthines will eliminate extracellular fluid, as evidenced by loss of edema and increased amounts and concentration of urinary sodium.

When one studies the effect of these so-called diuretic agents on sodium and urinary excretion, the following observations seem warranted. It appears possible to alter independently urinary volume and urinary sodium. An increase in fluid intake causes an increase in urine volume without increase in sodium excretion. By contrast the xanthines may increase the sodium excretion by increasing the concentration without significant increase in urine volume.

These observations suggest the arrangement of diuretic agents into three general categories depending upon their effect on sodium and urinary excretion. Increased excretion of urinary sodium may be induced by increasing the urinary volume through the use of intravenous fluids. This effect is slight and transitory, and the increased sodium loss is obtained even though the sodium concentration in the urine is diminished. This type of diuresis suggests "a washout" process. It appears that the increased urinary sodium is obtained by the direct effect of an augmented urinary volume produced by the fluids injected.

The second condition under which increased sodium excretion is observed is through an in-

crease in urine volume. This condition may be achieved by the use of ammonium chloride. The acidosis induced by ammonium chloride is associated with an increase in urinary sodium excretion. Apparently sodium is mobilized to compensate for a relative acidosis, and the increased amount of sodium is excreted by the kidneys. The increased sodium excretion is associated with a comparable increase in urinary volume, without significant change in sodium concentration. This is in contrast to the decreased sodium concentration found in patients described under the "washout" process.

The third circumstance under which an increased sodium excretion may be obtained is through a greatly increased sodium concentration in the urine. The mercurial and xanthine diuretics increase the total sodium excretion by this means. The mechanism of this change is not apparent. The increase in sodium excretion is obtained without a corresponding increase in volume, and, in some instances, even with a decreased urine volume.

Thus, increases in sodium excretion seem to be obtained by three mechanisms: (1) an increased urine volume associated with a decreased sodium concentration, (2) comparative increases in urinary sodium and volume without changes in sodium concentration, and (3) an increased concentration of sodium without a corresponding increase in urine volume.

Morphine produces a definite antidiuretic effect. When large amounts of morphine are used in the control of convulsions, some of the oliguria may be the result of the morphine. It has been shown by Ferrier and Sokoloff that morphine or demerol may obliterate the diuretic effect of the mercurials in cardiac patients.

While the studies which are available on toxemic patients are too few to be of any clinical value, it is of interest that apparently the toxemic patient handles water and sodium in a manner similar to the normal pregnant woman, and will respond in a similar fashion to diuretic agents. The evidence available suggests that the mercurials and xanthines are worthy of clinical trial, but the simultaneous use of sedatives may prevent their diuretic action in the management of patients with severe toxemia.

### Conclusions

1. An effective diuretic substance should induce the mobilization and excretion of extracellular



fluid (edema). Such mobilization of extracellular fluid is demonstrated by an increased excretion of urinary sodium. Diuretics vary both in the degree and mechanism of this effect.

2. The increase in sodium excretion appears in three forms suggestive of different mechanisms of diuretic action.

(a) A decreased sodium concentration associated with greatly increased urinary volume. This is typical of intravenous fluid and suggests a "washout" process.

(b) A moderate and corresponding increase in both sodium and water excretion without change in sodium concentration. This is observed in diuretics that produce an acidosis, such as ammonium chloride.

(c) An increased sodium concentration independent of changes in urine volume. This response is observed with the xanthine and mercurial agents.

3. Hypertonic dextrose solutions do not increase sodium excretion.

4. Induced increases in sodium excretion are transitory (twenty-four to forty-eight hours).

5. Morphine produces a temporary urinary suppression.

6. Apparently toxemic and normal pregnant women respond similarly to diuretic agents.

The authors are indebted to B. Downing, E. Peterson, D. McLaughlin, and O. Kraushaar for some of the material herein presented which represents parts of their master theses.

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## PENICILLIN TROCHES

The advent of penicillin therapy has been of immense benefit to all physicians. As frequently happens with a new form of therapy, the public is apt to use a new drug indiscriminately and injudiciously. It is well to remember that such indiscriminate use of penicillin troches without proper medical supervision may result in disaster for the patient. It has been established that penicillin has little effect upon the Klebs-Löffler bacilli so that the patient with a "sore throat" who is actually suffering from diphtheria may be lulled into a false sense of security. Likewise, in the case of an acute streptococcus infection of the throat the use of penicillin troches may relieve the symptoms of the sore throat but prove ineffective in such serious complications as acute glomerulonephritis or acute rheumatic fever.

It is well for physicians to remember that the indiscriminate use of penicillin troches by the general public without proper medical supervision should be deprecated in view of the serious complications which might easily develop.—Editorial, *Journal of Iowa State Medical Society*, December, 1948.

## Unusual Civilian Thoraco-abdominal Injury

By Karl W. Linsenman, M.D.

Midland, Michigan



WORLD WAR II is ended, but the slaughter continues on the highways throughout the nation. Although the annals of war surgery contain many accounts of thoracoabdominal wounds, this case was considered unusual enough to merit reporting.

### Case Report

A.O., a white man, aged forty, was admitted, by ambulance stretcher, to the hospital emergency room following an automobile accident about one hour previously. Supposedly, he was driving about forty miles an hour when he lost control of his car on icy roads and



Fig. 1. Patient on admission, with rifle muzzle and magazine apparent. A man is supporting the stock.

crashed into a tree. A .30-.30 carbine had been leaning against the seat of the car at his right side, the stock resting on the floorboards. The violence of the crash forced the magazine tube and barrel through the patient's body, where it still remained on arrival at the hospital (Fig. 1).

Admission examination revealed the patient to be lying on his left side, holding the stock of the gun in his hands. He was cold, clammy, conscious and in severe pain. The blood pressure was 85/?, the pulse was thin, even and rapid. There were deep, transverse lacerations of the midfrontal area of the skull and bridge of the nose, both of which were bleeding freely. There was little, if any, excursion of the right chest wall, being effectively splinted

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by the gun barrel, which had entered in the right hypochondrium at the right nipple line, and had followed a course obliquely cephalad, emerging in the right post-axillary line at the level of the tenth rib. Moderate

the skin and contused muscle at entrance and exit was done prior to the closure of these layers. Gradual reduction of pressure to atmospheric showed that the pleural wound was effectively sealed. No drains and no local



Fig. 2. Portable x-ray taken immediately postoperatively shows complete expansion of lungs, smooth diaphragm leaf and fractured ribs.

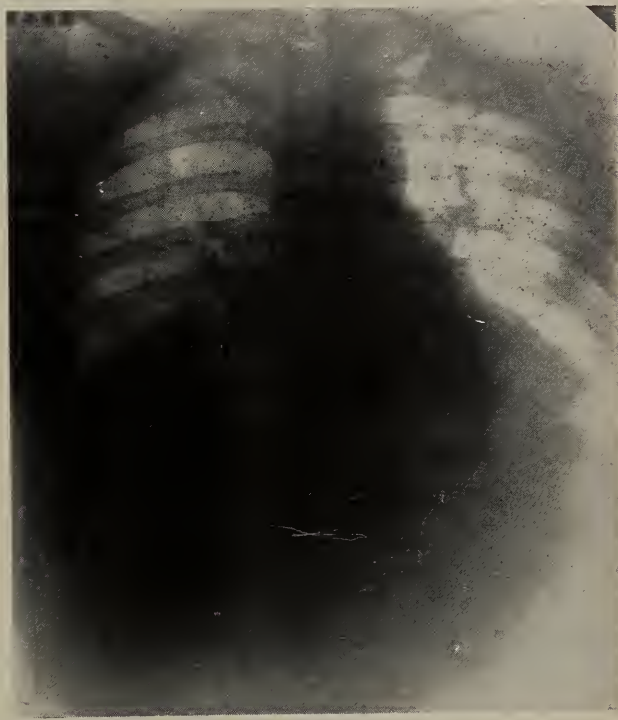


Fig. 3. X-ray of chest at time of discharge on twelfth post-operative day.

bleeding was evident at both entrance and exit of the gun barrel. On gentle palpation, the right half of the abdomen was found to be rigid, the left half soft. Multiple minor lacerations and abrasions of the upper and lower extremities completed the picture.

After this brief evaluation of the patient's condition, he was given 100 mg. of demerol and intravenous plasma. Forty minutes later his pulse was much improved and his blood pressure was 88/50. He was then given light sodium pentothal anesthesia, his clothing cut away, and then he was removed, still on the stretcher, directly to the operating table.

Under sodium pentothal-nitrous oxide-oxygen anesthesia, an incision was made directly over the pathway of the gun barrel. As soon as the muscular layer was incised an open pneumothorax was present. Positive pressure was begun immediately. Sections of the fractured tenth and eleventh ribs were removed, freeing the gun. Careful inspection revealed a shredded pleura, a 5-inch rent in the diaphragm and multiple lacerations of the peritoneum. There was no difficulty in examining the lung, the liver and the hepatic flexure of the colon, in none of which could any traumatic pathology be found. Although there was some bleeding from the torn diaphragm, in the main the abdomen and the chest wall were the prime sources. Using chromic No. 1 sutures, interrupted and continuous throughout, the pleura, then diaphragm, then peritoneum were closed. Excision of

antibiotics were used. His condition was "fair" at the end of surgery—blood pressure 90/60, pulse 70.

On moving the patient from the operating room to his room, his pulse jumped to 136 and was of poor quality. On being placed in an oxygen tent, the pulse rapidly returned to 88. A bedside portable x-ray was taken (Fig. 2). 500 c.c. whole blood were given.

He was given combined sera, penicillin, 100,000 units every three hours intramuscularly, and 1 gram of streptomycin intramuscularly daily in divided doses. His convalescence was relatively smooth. A microscopic hematuria, present the day after surgery, cleared without further incident. On the second postoperative day he became restless, anxious and seemed to be somewhat dyspneic. His blood pressure at this time was 154/90. A pulmonary embolus was suspected, but x-ray of the lungs again revealed no pathologic condition. On the third postoperative day the patient was tried out of the oxygen tent for a few hours, but as respiration became more labored, the tent was again used. On the fourth postoperative day the oxygen was discontinued. Streptomycin was discontinued on the fifth, penicillin on the seventh, and bathroom privileges were given on the eighth day. He was discharged ambulant on the twelfth postoperative day. His highest temperature was 101°. The wound healed by primary intention. Two months later he presented no delayed pathologic sequelae.



### Comment

That the wounded patient should not be subjected to surgery while in shock is a widely accepted dictum. More vague is the criteria for determining the state of shock, or operability of a given emergency. Beecher<sup>1</sup> has shown that attempting to obtain a "normal" blood pressure before surgery may not only be unnecessary but actually can be harmful procrastination in the presence of serious traumatic intrathoracic or intra-abdominal pathology.

The obvious penetration of the diaphragm constituted the prime reason for operation<sup>3,6,15</sup> as soon as the blood pressure level and pulse rate had apparently stabilized. No x-rays were taken prior to surgery as the path of the foreign body (gun barrel and magazine) was obvious in this instance.

Light sodium pentothal anesthesia was administered prior to moving the patient or cutting off his clothing, to avoid further shock from severe pain and the unusual impaling foreign body. The sodium pentothal with nitrous-oxide and high concentration oxygen gave quite adequate anesthesia. Although preferable, no intratracheal tube was available.<sup>4,9</sup>

He was shifted to positive pressure immediately when pneumothorax became apparent,<sup>13</sup> in order to minimize possible mediastinal shift and compression of the good lung which was in the lowermost position. Complete expansion of the lung was evident, both at the operating table and by subsequent x-rays. The importance of such complete, continuous expansion in lowering the mortality of thoracoabdominal injuries is well known.<sup>2</sup>

Airtight closure was achieved with difficulty because of the shredding of the tissue, presumably by the gun sight as well as by the blunt end of the gun. Dangers inherent to open drainage of thoracic wounds and the necessity for prompt closure of an open pneumothorax have been repeatedly reported in medical literature.<sup>11,17</sup>

Abdominal rigidity is usually confined to one side in the case of a thoracic wound on that side,<sup>5</sup> while the abdominal rigidity is more likely to be bilateral with an injury below the diaphragm. Although in this instance rigidity was confined to the right side, it seemed virtually impossible that the upper right quadrant viscera could escape damage. We were amazed to find none whatever, with very adequate visualization of the entire field of potential pathologic damage.

Clinically, no reaction to the 500 c.c. whole

blood transfusion was manifested; we feel that the microscopic hematuria was the result of a contusion of the right kidney, possibly on the basis of shock wave.<sup>7</sup> Bogles' results from extreme conservation in the treatment of wounds of the kidney<sup>3</sup> led us to assume a watchful waiting policy.

One may object to the massive dosage of penicillin plus streptomycin in this case. When one considers that transdiaphragmatic injuries have a mortality rate of 25 to 40 per cent,<sup>14</sup> hindsight seems a poor substitute for a possible unnecessary medication. Where a blunt object, such as a gun barrel and magazine, forces clothing through the abdominal wall, causes a wide rent in the diaphragm and pleura and creates compound fractures of two ribs, it is reasonable to assume that a potential mixed infection is present. Crile has written of his excellent results in peritonitis, using massive doses of penicillin. The value of streptomycin under various surgical conditions is well documented.<sup>8,10,12,18</sup> We were not concerned with possible otic complications relative to the use of streptomycin,<sup>16</sup> as only 1 gram was given daily for five days.

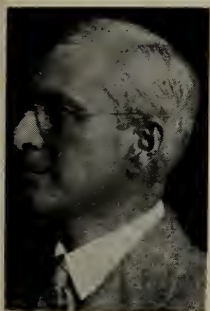
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# The Periodic Diagnosis of Infant Development

By Arnold Gesell, M.D.

New Haven, Connecticut



**WE LIVE** in a troubled age. But babies are still being born, and at an accelerated rate. In round numbers almost 4,000,000 were born in the United States in 1947. By 1950, infants and children under fifteen years of age will be the largest single population group in the country. In true

American style the headlines report all this as *Booms in Births, Babies Mean Business!*

An audience of pediatricians and general practitioners does not need to be reminded of the fate that awaits many of these infants. United States Public Health Service reports that there are now at least 30,000,000 persons in the United States who require some form of mental hygiene attention. The breakdown in round numbers is: 5,000,000 suffer from psychoneuroses; 2,500,000 have character and behavior disorders; 1,500,000 are mental defectives; 500,000 epileptics; 20,000,000 or more have borderline or transient emotional disturbances.

The vastness of the problem represented by these statistics is staggering. It is estimated that only one out of twenty persons with psychoneuroses now receives psychiatric treatment. The total problem is so colossal as a sheer cultural task that we are obliged to consider it more fundamentally in terms of preventive medicine.

If we use foresight would we not have to begin to reckon more deliberately with the newborn infant? I do not wish to describe a medical Utopia, but shall venture a few suggestions which are workable and which would serve to protect and to increase mental health.

No arbitrary distinction needs to be made between physical and mental health. Modern medicine is driven to a monistic approach which recognizes the interaction of body and mind.

*The infant comes by his mind as he comes by his*

Presented at the eighty-third annual session of the Michigan State Medical Society, Detroit, September 22, 1948.

*body—through process of growth. He develops as a unit.* This premise yields three propositions: (1) Development is the supreme function of the organism because it sums up all other underlying processes. (2) Health from a dynamic standpoint must be defined as that condition which permits and promotes optimal development. (3) Development as well as disease falls within the scope of clinical medicine. This last proposition leads to the subject of this paper.

How can this proposition be implemented in a manner which will protect mental as well as physical health? Only by bringing the total complex of infant development under periodic diagnosis.

The foundations for such diagnosis have been well laid in modern practice. The pediatrician, in particular, has recognized the importance of periodic check-ups during the first years of life when growth is most basic and most rapid.

Developmental status manifests itself in three major kinds of signs and symptoms: anatomic, physiologic, and behavioral. First and foremost, attention is given to the infant's nutrition. This is as it should be. His weight, height, girths, body proportions, somatotype, growth rate, tonus, metabolism, allergies, all furnish important anatomical and physiological evidences of developmental status. The increasing refinement of biochemical and electrometric methods and micromasurements is destined to refine further the somatic appraisals of growth conditions. Behavior, however, will always remain the most inclusive and sensitive indicator of developmental status. The infant is a unitary action system which reveals itself lawfully in patterns of behavior. His behavior characteristics and capacities infallibly indicate the maturity of his neuromotor equipment. Behavior expresses the achieved efficiency of his total organism.

To appraise behavior we need systematic methods of interview, observation, and diagnosis. We must employ standard techniques adapted to individual and age differences. The examination must be conducted formally with precision of purpose. We cannot rely on intuition and incidental observation. To be sure, the seasoned practitioner through long experience develops considerable familiarity with the indices of maturity. He dangles the bell of his stethoscope before the child and notes how the child reacts with eyes, and hands and mouth. Or he permits the infant to play with the tongue depressor. On the basis of such objective ob-



# INFANT DEVELOPMENT—GESELL

## PRELIMINARY BEHAVIOR INVENTORY

Name	Age	Date	Case No.	
Age Zone	Motor	Adaptive	Language	Personal—Social
4 wks. Zone	Lacks head control	Brief eye following	Impassive face	Stares at surroundings
	Asymmetric in supine	Drops toy immediately	Small throaty sounds	'Listens' to sound
16 wks. Zone	Head erect, slight bobbing	Incipient approach, rattle	Coos	Spontaneous social smile
	Symmetric supine postures	Regards rattle in hand	Laughs aloud	Hand play
28 wks. Zone	Sits, leaning forward	Reaches & grasps toy	Squeals	Feet to mouth
		Transfers toy	m-m sound (crying)	
40 wks. Zone	Sits well, creeps	Combines 2 toys	Dada-Mama	Nursery tricks
	Pulls to feet at rail	Picks pellet, thumb & index	One other 'word'	Feeds self cracker
52 wks. Zone	Walks, one hand held	Cube into cup	Two other 'words'	Cooperates in dressing
		Tries tower 2 cubes	Responds "Give it to me"	
15 mos. Zone	Walks, alone, toddle	Tower 2 cubes	4-6 words	Points & vocalizes wants
		Six cubes into cup		Casts toys
18 mos. Zone	Walks well alone	Tower 3-4 cubes	10 words	Toilet regulated, day
	Seats self small chair	Imitates a stroke	Jargon	Carries, hugs doll
2 yrs. Zone	Runs	Tower 6-7 cubes	Joins 2-3 words	Asks for toilet, day
	Up, down stairs alone	Imitates circular scribble	Names 3-5 pictures	Puts doll to bed, etc.
3 yrs. Zone	Rides tricycle	Imitates 'house' of cubes	Sentences	Feeds self well
	Stands 1 foot, momentarily	Imitates cross	Gives full name, sex	Puts on sox, unbuttons

INSTRUCTIONS: (1) Check the most advanced behaviors in EACH FIELD OF BEHAVIOR. (2) The checks will indicate an APPROXIMATE maturity age zone. (3) NO DIAGNOSIS CAN BE MADE ON THE BASIS OF THIS INVENTORY. Gross deviation from actual age, or marked disparity between behavior fields indicates the need for a diagnostic behavior examination.

CHARACTERIZATION: (physical factors, social factors, posture, attention, rapport, emotion, speech, etc.)

servation, the physician makes an automatic judgment of the approximate maturity of the child. Very often the judgment is correct, but the sources of error are extremely numerous. If the infant looks at all normal, the physician is tempted to say, "Give him time. He's all right. He will outgrow it!" The result is that many developmental defects and deviations escape early diagnosis, and parents do not get the kind of help to which they are entitled.

Whether the child is handicapped or not, parents constantly seek assurance with respect to his physical growth and ask questions for guidance as to proper methods of everyday care. Parents are also increasingly concerned about the child's total development which includes his mental health.

Should not clinical medicine contrive to meet these demands which are becoming more and more articulate? Pediatricians are showing the way both in private practice and in community service through well baby conferences. The periodic supervision of a baby's development begins with nutrition, but it does not always end there. To realize a more complete health service, it is necessary to

take into account the total economy of the child's organism including his behavior characteristics and his general functional maturity.

Even the busy general practitioner can make a *behavior inventory* from time to time as a minimum check and as a screening device for detecting abnormalities. Such an inventory can also be used as a point of departure for guidance in the field of parent-child relationships.

In contrast to the behavior inventory, the *developmental examination* is a standardized procedure with a well-defined technique. The procedure requires special training and clinical skill based on ample experience with normal, deviant, and defective infants. The principles and methods of developmental diagnosis can be best delineated by slides and cinema.

[A film with commentary by the speaker was shown to demonstrate: (a) maturity stages in the patterning of infant behavior; (b) methods of developmental examination.]

In the method evolved at the Yale Clinic, we use an ordinary hospital crib with adjustable side panels supporting a table top on which simple test objects are placed to elicit characteristic patterns

# INFANT DEVELOPMENT—GESELL

## GESELL DEVELOPMENTAL SCHEDULES

Name	Age	Date	Case No.
KEY AGE			
24 weeks	28 weeks	32 weeks	
MOTOR			
Su: lifts legs high in ext. Su: rolls to prone  P. Sit: lifts head, assists (*40w) Sit: chair: trunk erect (*36w) Cube: grasps, palmarwise (*36w) Ra: retains	Su: lifts head (*40w) Sit: briefly, leans fwd. (on hands) (*32w) Sit: erect momentarily St: large fraction of weight (*36w) St: bounces actively (*32w) Cube: radial palmar grasp (*36w) Pellet: rakes (whole hand), contacts (*32w)	Sit: 1 min., erect, unsteady (*36w) St: maintains briefly, hands held (*36w) Pr: pivots (*40w) Pellet: radial raking (*36w) Pellet: unsuccessful inferior scissors grasp (*36w)	
ADAPTIVE			
D. Ring, Ra, Cube, Bell: approaches & grasps Ra: prehen. pursuit dropt Ra  Cube: regards 3rd cube immediately Cube, Bell: to mouth (*18m) Cube: resecures dropt cube M. Cubes: holds 1, approaches another	Ra, Bell: 1 hand approach & grasp M. Cubes: holds 1, grasps another Cube: holds 2 more than momentarily Bell: bangs (*40w) Ra: shakes definitely D. Ring, Cube: transfers Bell: transfers adeptly Bell: retains	Cube: grasps 2nd cube Cube: retains 2 as 3rd presented Cube: holds 2 prolongedly  Cup-cu: holds cube, regards cup Ring-str: secures ring	
LANGUAGE			
Bell-r: turns head to bell Vo: grunts, growls (*36w) Vo: spontan. vocal. social (incl. toys)	Vo: m-m-m (crying) (*40w) Vo: polysyllabic vowel sounds (*36w)	Vo: single syllable as da, ba, ka	
PERSONAL-SOCIAL			
So: discriminates strangers Play: grasps foot (supine) (*36w)  Play: sits propped 30 min. (*40w) Mirror: smiles and vocalizes	Feeding: takes solids well Play: with feet to mouth (supine) (*36w) Mirror: reaches, pats image Ring-str: fusses or abandons effort (*32w)	Play: bites, chews toys (*18m) Play: reaches persistently for toys out of reach (*40w)  Ring-str: persistent	

of behavior, patterns which are symptomatic of the maturity and the organization of the infant's nervous system. For example one of our test objects is a red one-inch cube. The newborn infant is so immature that he cannot perceive the cube, but he does clasp it with a reflex grasp when it is pressed into his palm. At *sixteen weeks*, when the infant is held in a supported sitting position, he perceives a nearby cube and fixates his eyes upon it. His nervous system is growing at a prodigious rate. At *twenty-four weeks* he can co-ordinate eyes and hands; he seizes a cube on sight. It is a crude palmar grasp. At *twenty-eight weeks* the radial digits come more prominently into play. New behavior patterns are taking shape as the nervous system undergoes its progressive organization. Having seized a cube, he can transfer it from one hand to another. At *forty weeks* he grasps the cube deftly by thumb opposition. At *twelve months* he can release the cube on intent. At *eighteen months* he builds a vertical tower of three cubes. At *two years* he builds a horizontal wall of three cubes, at *three years* a bridge of three cubes, and at *five years* he builds a staircase of six cubes.

These are lawful sequences of growth, only sec-

ondarily influenced by cultural factors. They are so fundamentally determined by intrinsic growth factors that they may be used as criteria for appraising the maturity and integrity of the nervous system. All psychologic development, even in the sphere of intelligence and emotions, is subject to similar maturity sequences. *These growth sequences and these patterns of behavior are identified and appraised through the method of developmental diagnosis.*

The method is based upon a systematic investigation of the behavior growth of a large group of normal infants whose development was followed at periodic intervals from birth through the first five years. The infants were examined under controlled but home-like conditions, with the full cooperation of the parents. Great care was taken to secure natural and optimal behavior. Extensive cinema records were made at lunar month intervals during the first year of life and at lengthening intervals later. These records were subjected to minute inspection and analyzed as so many anatomic cross sections of behavior patterns. The home behavior of the infants also was explored. On the basis of these periodic observations, it was



possible to define the behavior characteristics typical of a series of advancing age levels from birth through five years of age.

Four major fields of behavior are embodied in these norms of development as follows:

*Motor Behavior.*—Posture and locomotion; prehension and manipulation; gross and fine motor co-ordination.

*Adaptive Behavior.*—Self-initiated and induced behavior; learning; resourcefulness in adjusting to new situations; exploitive behavior.

*Language Behavior.*—Vocalizations; vocal signs; words; gestures; comprehension.

*Personal-Social Behavior.*—Reactions to persons; response to gesture and speech; socialized learning; habits of self help.

Typical or normative behavior traits are codified in the form of developmental schedules, embracing the first five years of life. One of these schedules is illustrated herewith.\* The schedule for a Preliminary Behavior Inventory is also shown.

Although a *behavior inventory* does not constitute a developmental examination and can never take the place of such an examination, it can serve useful purposes. Periodically undertaken by the family physician, it becomes a valuable part of the history record of the child, particularly if untoward developments occur in later life. In child care institutions and also in children's hospitals, a routine periodic check serves to keep the clinical problems of development in focus. Even under apparently favorable conditions it is possible to neglect an institutional child if the pattern of his development is not kept in mind.

The developmental welfare of the child is, however, better protected if at selected age levels his growth status is systematically appraised by a pediatric examination which includes a *developmental examination* of behavior and an inquiry into parent-child relationships. This type of developmental appraisal is essential to a preventive and supervisory policy of mental health protection.

The developmental examination of infant behavior accomplishes five results:

1. It ascertains stages and degrees of maturity.
2. It leads to early differential diagnosis of normality, defect, and deviation.
3. It reveals neurologic defects and sensory handicaps not disclosed by ordinary methods of clinical examination.

\*Gesell, A., and Amatruda, C. S.: *Developmental Diagnosis: Normal and Abnormal Child Development. Clinical Methods and Pediatric Applications.* New York: Paul B. Hoeber, Inc. Enlarged and revised edition, 1947.

4. It supplies important objective information concerning the organization of personality.

5. Periodic examinations make possible a constructive type of developmental supervision which takes mental health into account.

We need not assume that every pediatrician will suddenly become an expert in developmental diagnosis. Neither can we assume that the vast task of mental hygiene can be conveniently referred to child psychiatrists who are mainly concerned with frank behavior disorders and psychopathologies.

A comprehensive program of mental hygiene will, naturally have to rest on a basis of pediatric and general medicine. The child's doctor, whether specialist or generalist, has the primary medical responsibility. Even before the child is born he can collaborate with a co-operative obstetrician and anticipate that part of maternal hygiene which is preparatory to parenthood. The psychological orientation of the mother (and indeed also the father) to the problems of the neonatal period can be foreseen by suggestive guidance in the prenatal period.

Well-placed periodic developmental appraisals during the first years of life are indicated for relatively normal children as well as for those who are not developing satisfactorily. By extending the concept of developmental supervision to all infants we shall be in a better position to individualize child care and to attain the goals of a preventive mental hygiene.

Should not this concept of development become part of the professional training of all physicians dealing with children? Some induction and pre-clinical indoctrination may be accomplished during the basic medical courses. But at the postgraduate level we need a teaching center setup functioning in close relation with a specialized diagnostic unit—the unit to be equipped for developmental diagnosis and for the demonstration of normal infants as well as more unusual cases.

The intern and resident should be systematically and concretely exposed to a clinical science of child development. Such a science deals with the nature and norms of the developmental process in embryo, fetus, neonate, infant and child. It is basically concerned with the laws and manifestations of healthy normal development. It employs the criteria of normality to interpret all forms of maldevelopment, mild, moderate, and grave. By concentrating upon the normal potentials of growth

## Acute Abdominal Emergencies

By Philip Thorek, M.D.

Chicago, Illinois



ACUTE ABDOMINAL emergencies will always tax the skill of the practitioner and surgeon alike. After examining the charts from the surgical services at the Cook County Hospital for a period of ten years, I found six outstanding conditions that we mistake most frequently; they are: (1)

acute cholecystitis, (2) perforated peptic ulcer, (3) acute appendicitis, (4) renal colics, (5) acute hemorrhagic pancreatitis and (6) coronary occlusion. There is a seventh disease which deserves special consideration, namely, salpingitis. An acute or chronic salpingeal pathologic condition is frequently associated with a perihepatitis which produces pain in the right upper quadrant (pseudo-gall-bladder pain). Because of this, gall-bladder explorations and other surgical procedures have been done in cases of salpingitis, resulting in danger to the patient and embarrassment to the surgeon.

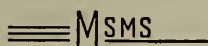
One must have a simple and workable plan in mind to make a correct diagnosis. Our plan consists of four headings: (1) history, (2) present symptom complex, (3) physical examination and (4) laboratory data. This routine has served us well and we utilize it daily.

### Acute Cholecystitis

The dictum that certain types of people are predisposed to certain types of diseases seems to be correct. The gall-bladder type is described as being fair, fat and forty, usually a woman in the latter fourth or fifth decade and somewhat obese. There is always an exception to the rule, hence, the most fulminating hydrops of the gall bladder on our service was seen in a young thin boy of sixteen. The age of forty is related to a previous history of pregnancy, and this is theoretically explained in the following way: the average woman has her

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From the Departments of Surgery of the University of Illinois, Cook County Graduate School of Medicine, Hektoen Institute of Medical Research, Cook County Hospital, American Hospital and Alexian Brothers' Hospital.



### DINOSAUR-LIKE IMPRINT

Did a dinosaur lie down in the mud, near the present site of West Coxsackie, N. Y., leaving the imprint of his scaly hide which was subsequently buried in silt and hardened into a permanent stony record? Or is there a less dramatic explanation for the marks?

At the meeting of the Geological Society of America in New York, Dr. George H. Chadwick, consulting geologist of Catskill, N. Y., called the attention of his colleagues to the peculiar "dinosaur leather" markings on a vertical rock surface by the roadside, about six feet wide and 30 feet long. He presented his observation as a challenge for investigation. It will be necessary to work fast, however, he said, since weathering will soon sponge out this puzzling record of the earth's dim past.—*Science News Letter*, November 20, 1948.



children in the third decade of life and while pregnant she develops a physiologic hypercholesterolemia. Some of this cholesterol deposits on the mucous membrane of the gall bladder, forms polypi which break off and become the nuclei for stones. It may take from ten to twenty years for gallstones to attain any appreciable size, so that by the time she reaches her fifth decade the stone is large enough to obstruct or irritate. Nulliparous women can also have gallstones or gall-bladder disease, but this too is the exception and not the rule.

In a middle-aged woman the history of recurrent attacks of abdominal pain, so severe that the physician must administer a sedative, is an acute gall bladder until proved otherwise. Acute appendicitis does not require morphine; renal colics will be differentiated presently, and coronary occlusion is rare in women. One of the most unusual lesions noted in the female is a perforated peptic ulcer. The gall-bladder patient also presents a previous history of "selective dyspepsia." By this we mean that there are certain specific foods that she cannot tolerate. There are four primary offenders to these foods; they are: fried and fatty foods, raw apples, cucumbers and cabbage. The patient does not use the term "dyspepsia," but describes this distress as the two "B's," namely, bloating and belching. To summarize and describe the gall-bladder patient one may use an alliteration and state that she is the patient with the seven "F's"; she is the fair, fat, fertile, flabby, female of forty.

The complaint is one of pain, and it is important to determine the type of pain which is present. A constant pain is due to edema, but colicky pain is caused by obstruction. This is one of the factors which indicate whether the case should be treated conservatively or surgically. It is unwise to treat an obstructed lesion conservatively, since these are cases which result in early gangrene and perforation. Morphine should not be used in gall-bladder disease because it is a smooth muscle contractor, and since the gall bladder is a smooth muscle organ one should not administer a medicament which would stimulate its activity. By increasing muscle tonus, morphine may actually aggravate or provoke gall-bladder pain and colic. One should not state, however, that the drug must never be used in gall-bladder disease, since it still has its place, namely, to prevent shock. These patients are treated first with nitrite therapy. One breaks an

amyl nitrite bead and lets the patient inhale the vapors; 1/100 grain of nitroglycerin is placed under the tongue, and three grains of sodium amytal or any other barbiturate are given by mouth. If this gives no relief we administer a hypodermic which consists of 100 mg. of demerol and 1/100 of a grain of nitroglycerin. Should these measures fail, antispasmodic therapy with such drugs as papaverine, aminophylline, et cetera, is tried. Morphine is used only after all other measures have failed.

Gall-bladder pain is usually located under the right costal margin, but may be referred to the stomach since these two organs originate from the same embryologic segment. The stomach responds to this stimulus in one of three types of gastric spasms: (1) pylorospasm, (2) midgastric spasm and (3) cardiospasm. If a pylorospasm is produced, the gall-bladder condition might be confused with peptic ulcer; if midgastric spasm results, a stomach carcinoma may be erroneously diagnosed; and if associated with cardiospasm, the pain appears on the left (pseudo-coronary pain), and coronary disease may incorrectly project itself into the diagnostic picture.

Radiation of pain should not be confused with referred pain. By radiation we mean that gall-bladder pain, located under the right costal margin, may radiate along the path of the seventh intercostal nerve to the inferior angle of the right scapula, or the interscapular region. Gall-bladder pain, therefore, cannot radiate to the right shoulder. Shoulder pain is an entirely different mechanism which involves the phrenic nerve and is indicative of peritonitis. When a gall-bladder patient has true shoulder pain, a diagnosis of gangrenous or ruptured gall bladder with biliary peritonitis should be made.

Temperature, pulse and respirations are included under the heading of physical examination. The patient with an acute condition of the gall bladder has an early high fever; hence, a temperature of 102° is not unusual within the first twelve to twenty-four hours of acute cholecystitis. The early fever is explained by the absence of a submucosa. Since this tough resisting layer is lacking, there is greater chance for early contamination and absorption in the peritoneal cavity. The patient has a pulse which is increased according to the temperature; therefore, for every degree rise in fever there will be approximately a ten-beat increase in pulse

rate. Respirations are slightly increased because breathing is painful. This is due to the fact that the inflamed gall bladder rubs against the sensitive parietal peritoneum; because of this, acute gall-bladder disease may be confused with pneumonia or pleurisy.

Although pain, a symptom, may be referred anywhere along its nervous path, tenderness, a physical finding, remains at the site of pathology. This is an excellent diagnostic rule, having few if any exceptions. The tenderness of gall-bladder disease will be located in the region of the right costal margin. If it is most marked on a level with the umbilicus, it may be difficult to determine whether the condition is an inflamed low-lying gall bladder or an acute high-lying retrocecal appendix. Two ways aid in the differentiation of these two conditions. First, we recall that the normal abdomen reveals a tympanitic note to percussion in all four quadrants. If the tenderness opposite the umbilicus is due to an inflamed gall bladder, we assume that the organ is unusually large or that a ptotic liver with an inflamed gall bladder at its free border is present. This would cause an obliteration of the normal tympany in the right upper quadrant and in its place the percussion note would be one of dullness or flatness. If the patient presents tenderness on the level with the umbilicus and retains normal tympany in the right upper quadrant, this would point to a high-lying retrocecal appendix. Another method of differentiating the gall bladder and appendix is by means of Ligat's test. This test locates areas of hyperesthesia over an inflamed organ. If the tenderness is due to gall-bladder disease, an area of hyperesthesia (elicited by picking up the skin and letting it drop) is present from the umbilicus upward to the right costal margin. If the tenderness is due to an acute appendix, the area of hyperesthesia will be found from the umbilicus down to Poupart's ligament.

A rectal examination is done as a routine in every physical examination. More important than the rectal or vaginal examination is a so-called bigital examination, which is conducted by placing the index finger in the vagina and the middle finger in the rectum with the perineum in between. This will immediately orient the examiner, and adnexal pathologic conditions will be revealed.

A flat x-ray film should be taken in every acute abdominal condition. One may determine whether a calcified gall bladder or visible stones are present.

It also gives an indication as to whether or not the liver is enlarged or ptotic. Routine laboratory tests are done.

### Perforated Peptic Ulcer

This condition is rare in women. Usually a previous history of peptic ulcer or hemorrhage can be obtained, but the onset may be with perforation.

The patient states that he was seized with a sudden pain, usually after eating; this was so severe that it doubled him up. The classical picture of perforated peptic ulcer with board-like rigidity and a shock-like syndrome is too well known to bear repetition. Two signs which should be sought for in every case, however, are: (1) the findings with auscultation, and (2) the presence of a pneumoperitoneum. Auscultation reveals an absolutely silent abdomen when an ulcer perforates, leaks and soils the peritoneal cavity. This is not new, since the late J. B. Murphy had stressed the importance of this finding many decades ago. When intestinal sounds are present, the diagnosis of perforated peptic ulcer is remote. These are exceptions, and one of these will be discussed presently under the subject of *forme fruste* ulcer. The next sign which helps clinch the diagnosis is the demonstration of a spontaneous pneumoperitoneum. Normally, a magenblase or stomach air bubble is present. When an ulcer perforates, this air bubble escapes into the general peritoneal cavity, and can be demonstrated either by percussion or with the fluoroscope; the latter is by far the more accurate. The patient is placed on his left side so that the free air bubble may gravitate upward between the liver and the right hemidiaphragm. By so doing, the liver is displaced downward and is separated from the diaphragm. Normally the liver hugs the diaphragm and no air space is visible between them. If this air is of an appreciable amount, normal liver dullness is obliterated and in its place a tympanitic note is produced by percussion. The sign is easy to demonstrate, quite pathognomonic of perforated peptic ulcer, and present in about 70 per cent of all cases.

The *forme fruste* ulcer deserves special mention. The term refers to a pin-point perforation in the stomach or duodenum which is immediately sealed over by muscular contraction or by the overlying liver. Therefore, the spillage is minimal and the amount of peritoneal soiling is small. Such patients may experience a sudden sharp pain in the epi-



gastrium, but the typical physical findings are lacking. This patient may be able to straighten up and walk about. Abdominal sounds are usually present and the air bubble may remain intragastric, having had no chance to leave the small perforation. These patients, therefore, present a misleading picture and have been misdiagnosed. However, with the ingestion of their next meal they usually reperforate and then present the typical findings.

The temperature, pulse and respirations will depend upon whether or not shock is present. Most perforated peptic ulcers present a shock-like picture which varies in its intensity. The shock associated with perforated ulcers responds rapidly to therapy. Within a few hours, the classical picture of peritonitis develops with the associated increase in temperature, pulse and respiratory rate.

The contents from a perforated ulcer may pass downward along the so-called "paracolic gutter of Moynihan," pool around the appendix and produce exquisite tenderness at McBurney's point. The diagnostician must then be on his guard, since such a history would suggest an epigastric distress with localization to the right lower quadrant which could be confused with an acute appendix. Upon exploratory operation, free fluid will be found in the peritoneal cavity with all signs of a peritonitis, and a red and injected appendix seen and removed. These patients usually die if the leaking ulcer is overlooked. This catastrophe can be avoided if, before closing the abdomen, the appendix is opened and the mucous membrane examined. Since acute appendicitis starts in the lumen of the appendix and travels outward, a normal appearing mucous membrane would suggest looking elsewhere for the cause of the peritonitis.

Laboratory data includes the flat x-ray film which has been discussed under the subject of spontaneous pneumoperitoneum. Routine blood count and urinalysis are done. Some of these patients might have bled, and although perforated ulcers are known not to produce massive hemorrhage, signs of a secondary anemia may be present.

### Acute Appendicitis

One respects this condition the more one sees of it. The statement "only an appendix" is indeed a dangerous one. Acute appendicitis is most frequently found in individuals under the age of forty and is somewhat more common in men. It will be recalled that gall-bladder conditions appear

most frequently after the age of forty. The story that the patient relates is usually quite stereotyped. To put it in his language: "Something I ate gave me a belly-ache." This is his way of describing acute epigastric distress. When he gets this "belly-ache" he often attempts to obtain relief with either a cathartic or an enema. Within the first twenty-four hours his "belly-ache" becomes a soreness low on the right side. His acute epigastric distress has become localized to the right lower quadrant. The "two-question test" is both useful and time-saving. Question Number 1: "Where was your pain when it started?" To this interrogation the patient points to his entire abdomen. Question Number 2: "Where does it hurt you now?" He then points to the right lower quadrant, usually McBurney's point. This simple method of having the patient demonstrate diffuse pain which localizes to the right lower quadrant will diagnose the vast majority of cases of acute appendicitis.

Vomiting and nausea have been impressed upon us as being associated with appendicitis. This is the exception and not the rule. Anorexia, or loss of appetite, is more constant and more important than either nausea or vomiting. Anorexia, nausea and vomiting are three degrees of one symptom; anorexia is the mildest form and is associated with mild distention of the appendix; nausea, the middle degree, is due to moderate distention; and vomiting, the maximum degree, is found in greatly distended appendices. The most common symptom in acute appendicitis is anorexia, and if the patient states that his appetite is not altered we doubt the diagnosis of an acute appendix. Two complaints which are extremely rare in acute appendicitis are diarrhea and chills. These are probably found in less than 1 per cent of the cases. Constipation is the rule.

Fever is not an early finding in acute appendicitis; in fact, if present, it is suggestive of peritoneal soiling. It is true that cases of acute appendicitis may have a fever of 102° or 103°, but these are no longer cases of appendicitis; they are cases of far advanced peritonitis. Children prove the exception to this rule. If appendices would be operated upon when the temperature is below 99°, the mortality would be very low.

Acute appendicitis does *not* give right rectus rigidity. Although the reverse is taught in many schools and text books, this point should be clarified. It is impossible for an individual to contract his

right rectus muscle without contracting the left; therefore, when pressure is made upon an inflamed area, both rectus muscles contract. When only one rectus is rigid it suggests an underlying mass, such as a tumor or abscess. When both recti contract to pressure it should be considered "muscular defense" rather than right or left rectus rigidity. The importance of this bears emphasis when we realize that diagnosis, treatment and prognosis may depend upon the presence of right rectus rigidity or simple muscular defense.

The iliopsoas and obturator signs are not signs which diagnose acute appendicitis, but rather locate an acute appendix. Probably a misconception has arisen because these signs are usually discussed under the heading of acute appendicitis; they may, however, be produced in other diseases. The right iliopsoas sign is elicited by placing the patient on his left side and hyperextending the right leg. If positive, pain is produced over the iliopsoas fascia which will be manifested in the region of the right lower quadrant. In the presence of a history of acute appendicitis this would signify that the inflamed appendix is overlying the iliopsoas fascia and is retrocecal. A positive obturator sign will locate an inflamed pelvic appendix. It is conducted in the following way: with the patient on his back the thigh is flexed upon the abdomen and the leg upon the thigh; the leg is then abducted. This causes internal rotation of the thigh and stretches the obturator internus muscle. If this produces pain it is diagnostic of a fasciitis involving the obturator fascia, which could be caused by an inflamed tube, appendix, ovarian cyst, et cetera. If the patient elicits a history of acute appendicitis with a positive obturator sign, we conclude that the appendix is low-lying and in the pelvis. Rovsing's sign is also helpful. It is elicited by pressing over the left cecum; the colonic gas which has been pushed to the right will produce pain over the cecal region, which is quite diagnostic of acute appendicitis.

Routine bi-digital examinations are done; at times an acute appendix or appendiceal mass may be felt. Late and neglected appendices may produce a pelvic abscess which points rectally or vaginally, and this examination reveals the proper site and time for incision and drainage.

The laboratory data usually consists of a white blood count and a urinalysis. More important than the white blood count or urinalysis is a differential

blood count; this is easy to do and more accurate. If the "poly" count is high, we assume that an acute infectious process is present; a high "poly" count in the presence of a low white count means a poor prognosis. The urinalysis is usually negative but may be misleading; a few red cells in the urine are not pathognomonic of renal pathology. Negative urines have been recorded where a renal stone completely blocks the ureter so that no blood or pus can pass into the bladder.

### Renal Colics

Stones are not the only substance which produce renal colics, since the same syndrome may be produced by a small blood clot, inspissated pus, uratic debris, or a kinking of the ureteropelvic junction in a ptotic kidney.

The condition is more common in males, and the patient may reveal a history of previous attacks, a hereditary influence, a story of gout, or parathyroid pathology.

The patient complains of a sudden pain which starts in the lumbar region and radiates to the testicle, vulva, or the inner aspect of the thigh. With this pain he becomes extremely restless and thrashes about. A patient who is experiencing a colic is restless and moves about, but one who has a peritonitis lies perfectly quiet and resents being moved. Vomiting is a common symptom, as is a frequency of urination. During the act of micturition the pain may be altered.

Physical examination rarely reveals any elevation in temperature, but extremely characteristic of the condition is a bradycardia. It has oftentimes been stated that when a patient with an acute abdomen has "a clean tongue and a slow pulse" he has a renal colic until proved otherwise. Tenderness is most marked in the region of the twelfth rib of the involved side, and to elicit this finding it is unnecessary and cruel to utilize any type of "punch" test. The tenderness is so exquisite that mild percussion will demonstrate it. We prefer to use the term "Murphy tap" to "Murphy punch." A zone of hyperesthesia is usually found posteriorly at the level of and slightly below the twelfth rib. If this area is anesthetized with novocaine, the hyperesthesia and pain disappear.

A flat x-ray film may reveal a stone if such is present, but this is not reliable since non-opaque substances may also produce kidney colic. An intravenous pyelogram can be made without dis-



turbing the patient, and if necessary the film can be taken at the bedside with the aid of a stationary grid. The significant finding for a diagnosis of a stone in the ureter is the anuria which may be present on the affected side; the opposite side shows normal excretion. The kidney on the affected side usually appears increased in density since the dye in these tubules is more concentrated. This finding is sufficient for diagnosis of non-opaque stones in the ureter. A catheterized specimen of urine usually reveals pus, blood and albumin. The presence or absence of pus and blood in the urine is not pathognomonic since a stone may completely block the ureter and result in a normal urine. On the other hand, an inflamed appendix may be attached to the ureter, kidney or bladder, resulting in a secondary ureteritis, nephritis or cystitis with an associated hematuria. In such instances the laboratory report may be actually misleading.

### Acute Hemorrhagic Pancreatitis

It is important to recall that this disease may appear in one of two forms: either acute edematous pancreatitis or hemorrhagic pancreatitis. The former presents a mild clinical picture, but the latter, which is associated with fat necrosis and occasionally a hemorrhagic peritonitis, produces a fulminating one. The acute edematous form usually improves rapidly without therapy within forty-eight hours, but hemorrhagic pancreatitis gets progressively worse and often requires surgical intervention. It is the hemorrhagic type, therefore, which is important to identify and treat promptly.

Although the etiology of pancreatitis is unknown, there seems to be a mechanical factor which is associated with spasms, stones, swelling and stasis. The patient who develops acute pancreatitis is usually of the same type that develops gall-bladder disease; therefore, the condition is more common in women, rarely occurring before the age of forty, and is seen in stout people. The ratio of colored to white is one to fifty. The attack usually follows the ingestion of a heavy meal. The pain is dramatic, sudden and excruciating; it is felt in the epigastrium, and radiates into one or both loins. In this way pancreatic pain radiation resembles an inverted fan. When the patient sits up or lies on his abdomen, the pain is relieved, and is aggravated when he is on his back. Hence, in most pancreatic conditions, be they tumors or inflammations, the patient is usually found lying on his abdomen or in

a sitting position. Reflex vomiting or retching almost always occur; emesis which is truly reflex in nature is never feculent.

Physical examination reveals a patient that is usually in shock with cold and clammy extremities, subnormal temperature, and a rapid, thready pulse. Local epigastric tenderness is almost always present and is associated with a type of muscular defense which is localized to the same area. The rigidity is not truly board-like in nature, and the tenderness is most marked midway between the umbilicus and the xiphoid. An occasional finding is ecchymosis in one or both loins, or at times around the umbilicus. This is due to extravasated blood which finds its way around the retroperitoneal space and presents itself as greenish yellow or purplish discolorations. This finding, however, takes two or three days to appear. Mild jaundice is present in about half of the cases; this is explained by the fact that the common duct is pressed upon by a swollen head of the pancreas. Abdominal auscultation usually reveals a quiet but not silent abdomen.

Laboratory findings may be helpful in the diagnosis. An increase of serum amylase is specific in the acute phase, although a normal reading does not rule out acute pancreatitis. Polowe has emphasized the importance of determining the blood amylase activity in terms of cuprous oxide precipitation. He has shown that moderate to marked blood amylase activity is almost always associated with diseases of the pancreas, and normal or decreased blood amylase almost always excludes pancreatitis. Hypocalcemia is usually present and the level found is usually below nine. A flat x-ray film of the abdomen may reveal a separation of the upper and lower limbs of the duodenum brought about by an edema of the head of the pancreas. This latter finding is unusual.

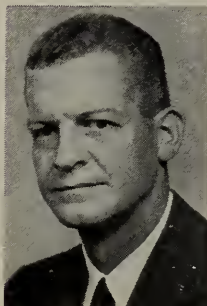
### Coronary Occlusion

Although this belongs to the realm of the internist, the general practitioner as well as the surgeon must be on his guard to avoid the fatal error of confusing an acute coronary disease with an acute abdominal condition.

Men are most susceptible to this condition, and it is usually found in those past the age of forty. A previous history of dyspnea or pain in the chest during exertion or excitement may be elicited. The attack is sudden, with severe pain in the chest

## Urological Aspects of Abdominal Pain

By John E. Dees, M.D.,  
Durham, North Carolina



THE UROLOGIST is often called upon by the general surgeon, the gynecologist, and the internist for help in determining the source of abdominal pain. In individuals with clear-cut and typical symptoms, the urinary tract may be immediately suspected and readily proven to be the source of the

pain in question. In other instances, however, the pain may be so atypical or so overshadowed by other symptoms that the urinary tract may be the last system suspected as being the source of trouble. It seems worthwhile, therefore, to present to a group with such varied medical interests as the present one, a urologist's approach to the question, "Does this patient's abdominal pain originate in the urinary tract?"

I shall present few facts that have not already been described. My main attempt will be to try to explain the less typical types of ureteral pain on a basis of pathological physiology. In order to understand more clearly some of the atypical discomforts that may originate in the urinary tract, I would like to review briefly certain fundamentals of the innervation and physiology of the kidney pelvis and ureter. These structures are richly supplied with autonomic nerves which communicate with the renal, inferior mesenteric, spermatic, celiac, hypogastric, and vesical plexuses, most of which, in turn, intercommunicate one with another. It should be born in mind that other intra-abdominal organs, including the stomach, colon, cecum, appendix, rectum, small bowel, and bladder, as well as the internal genitalia of the female are innervated through these same nerve plexuses. A stimulus, ultimately appreciated as pain by the higher centers in the central nervous system, may traverse very intimately associated nerve tracts whether it originates in a segment of the right ureter or in the appendix. It is this complex and

From the Department of Surgery, Division of Urology, Duke University School of Medicine and Duke Hospital.  
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which radiates out the left arm toward the abdomen or both shoulders. There is a sense of impending death with severe fright which usually supersedes the complaint of pain. The radiation may also be toward the epigastrium, so that the examiner's attention is directed to the abdomen rather than the chest. A usual complaint during such an attack is one of "indigestion." Although the pain of acute coronary disease may occur in the abdomen, it does not become localized; hence, no area of local abdominal tenderness is ever found. Marked abdominal distention may be present in coronary pathology but muscle or rectus rigidity are lacking. In abdominal catastrophes the patient lies perfectly quiet, but the coronary patient resembles the colic in that he is restless and tosses about. The acute cardiac patient presents veins in the neck which are distended and full, in contrast to the patient with the surgical abdomen who may appear pale and bloodless. Signs of impaired circulation are usually present, such as dyspnea, orthopnea and cyanosis. Auscultation will usually reveal rales in both bases due to pulmonary congestion. Cardiac enlargement, feeble heart sounds and occasionally a pericardial friction rub may be found. During auscultation of the abdomen, normal intestinal sounds will be heard which are absent or diminished in cases of peritonitis.

Positive electrocardiographic findings are pathognomonic, but one is not always fortunate enough to have an electrocardiogram handy. A leukocytosis may be present some hours after the disease takes place, and the urine is usually negative unless there is associated renal pathology.

We realize that many other conditions at times require differentiation in the acute abdomen. Some of these are: strangulated hernia, regional ileitis, mesenteric lymphadenitis, mesenteric thrombosis, ruptured ectopic pregnancy, ruptured graafian follicle, ileocecal tuberculosis, vasitis, torsion of the omentum, volvulus, intussusception, et cetera, ad infinitum. However, when one misses one of these unusual conditions he does not feel quite as responsible or guilty as he would having missed one of the forementioned "big six."

25 East Washington Street  
Chicago 2, Illinois

MSMS



rather vaguely understood mechanism of innervation that makes accurate localization of visceral pain often difficult.

Variation in the intensity of pain may alter its

as is seen in acute, nonobstructive pyelonephritis. However, increased pressure within the pelvis and ureter, in my experience, is always secondary to obstruction. In patients with ureterolithiasis, the



Fig. 1. Normal intravenous urogram. Note delicate cupping of calyces, absence of dilatation of pelvis and ureters and segmental filling of ureters.

radiation and distribution due to an overflow of pain impulses into an adjacent segment of the cord. Not infrequently a patient is seen with a stone in the lumbar ureter whose discomfort is well localized in the flank and back. With a paroxysm of severe colic, the pain may radiate down into the groin or genitalia, although unaccompanied by downward progress of the stone in the ureter.

Urine is normally propelled from its point of entrance into the renal pelvis downward through the ureter into the bladder by a series of peristaltic waves whose rate and amplitude are primarily dependent upon the volume of urinary flow. In normal intravenous urograms (Fig. 1) one can always see one and frequently two segments of ureter which contain no radiopaque dye. These empty segments of ureter are those which are undergoing peristaltic contraction. As will be pointed out later, complete filling of the entire ureter on intravenous urography usually is due to obstruction.

Renal and ureteral pain is, almost without exception, due to relatively abrupt increase in pressure within the true capsule of the kidney or within the lumen of the renal pelvis or ureter. Localized renal pain alone may be caused by increased intracapsular pressure due to parenchymal swelling

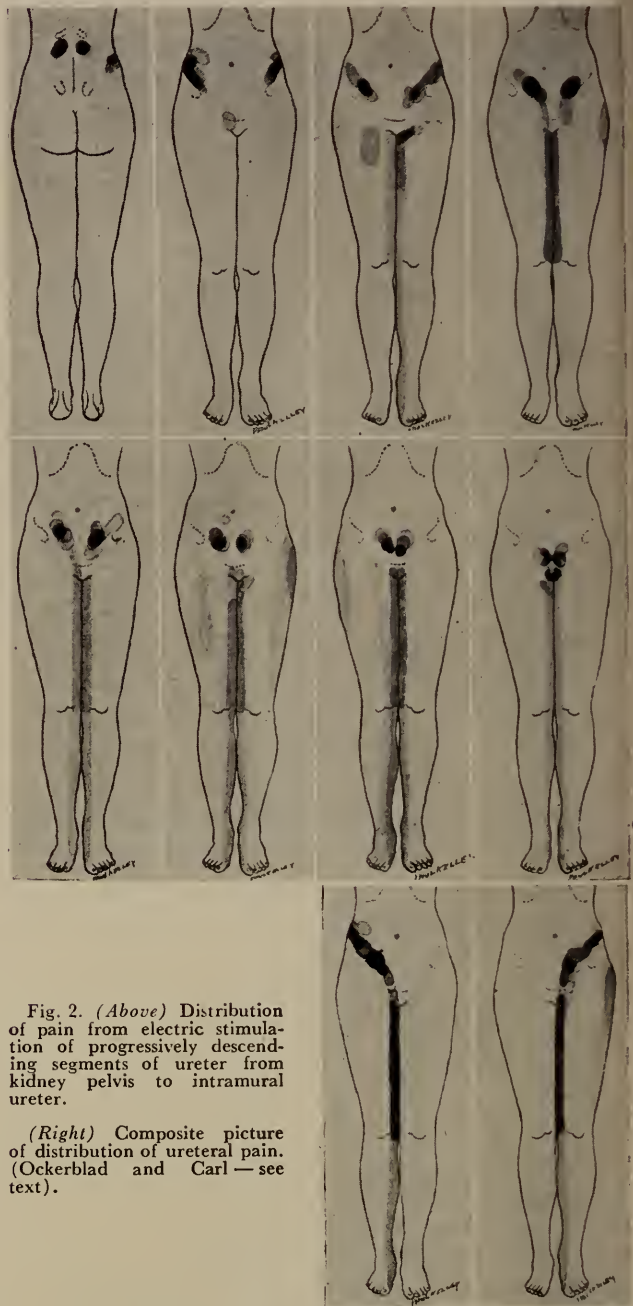


Fig. 2. (Above) Distribution of pain from electric stimulation of progressively descending segments of ureter from kidney pelvis to intramural ureter.

(Right) Composite picture of distribution of ureteral pain. (Ockerblad and Carl—see text).

severe pain of kidney colic is immediately relieved by passage of a ureteral catheter above the obstructing stone. Complete relief of pain occurs as soon as the distended ureter and pelvis above the obstruction are emptied of urine. The rough, irregular stone may remain in the ureter alongside the catheter, but as long as free drainage occurs, there is no discomfort.

Ockerblad and Carlson,<sup>1</sup> in an ingenious clinical experiment, accurately mapped out the distribution of pain from different levels of the upper urinary tract (Fig. 2). In a group of normal individuals,

frequently referred to the sacro-iliac and sacral regions from stimuli arising in the lower third of the ureter. It should be born in mind that these experimental findings have reference to pain originat-



Fig. 3. Duke Hospital No. C 33800 was treated for five days on the general surgical service for a possible perforating duodenal ulcer. His presenting symptom was one of extremely severe nausea and vomiting which clinically overshadowed moderate left abdominal pain of nondescript type. A duodenal ulcer was demonstrable on x-ray. Traces of blood were present in the vomitus. However, slight tenderness was present over the left kidney, a few red cells present in the urine, and the left ureter was found to be completely blocked by a small calculus. Immediate and permanent relief of all symptoms to the present time followed removal of the stone.



Fig. 4. No. C 31225 had had kidney colic on the right side intermittently for four months. The pain commenced in the costo-vertebral angle radiating around the flank, to the suprapubic region and genitalia. Recently, there had been marked urinary frequency unassociated with burning or pain. X-rays demonstrated a stone in the lower segment of the right ureter which was completely filled with dye above the point of obstruction on intravenous urography.

different segments of the ureter from kidney pelvis to the bladder were stimulated by means of a specially constructed ureteral electrode introduced cystoscopically. The locations of referred pain were mapped out upon the body surface. Stimulation of the kidney pelvis above the uretero-pelvic junction invariably produced pain referred to an area on the back, the center of which was the costo-vertebral angle. There was no radiation of the pain anteriorly or upward. Stimulation of various segments of the lumbar ureter produced discomfort radiating downward in a band just above the crest of the ilium. If lower segments of the ureter were progressively stimulated, the pain was referred progressively to the groin, genitalia, and inner aspect of the thigh and leg as far as the toes. There were interesting variations from the average in the location of pain referral. On occasions, pain was referred to the anterior or lateral aspect of the upper thigh, to the presymphyseal area and to the immediate supra-pubic region. Although not pointed out in their investigation, pain is not in-

ing from one isolated segment of the ureter. Clinically, secondary to obstruction, the pain pattern is usually a composite one arising from the entire ureter and kidney pelvis above the point of obstruction, extending from the costo-vertebral region to a point determined by the lowermost level of obstruction.

Because of the rich intercommunication between the nerve supply of the ureter and that of the gastrointestinal tract through the celiac, splanchnic and other abdominal plexuses, gastrointestinal symptoms occur with great regularity in association with pain originating in the upper urinary tract. Nausea, vomiting, flatulence and abdominal distention often accompany renal and ureteral pain and may overshadow the clinical picture (Fig. 3).

Both intravenous urography and retrograde pyelography are invaluable aids in the investigation of abdominal pain originating from the upper urinary tract. Each procedure gives us somewhat different information. The intravenous urogram portrays more faithfully the dynamics of the kidney pelvis and ureter; the retrograde pyelogram produces clearer visualization of inconspicuous



changes in these structures and likewise may aid in the diagnosis by reduplication or accentuation of the pain in question. With the intravenous urogram, any or all of three important abnormalities

rial, there may be filling only of the calyces, a portion of the pelvis, or of the upper ureter only. This stands out in sharp contrast to the complete filling of the opposite pelvis, segmental filling of its ureter

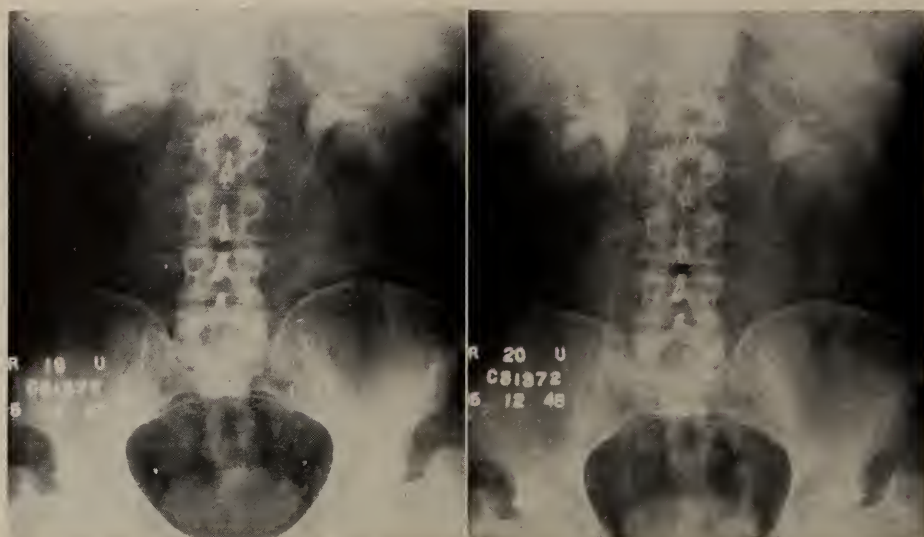


Fig. 5. No. C 31372 for eight years had had discomfort in the right abdomen, usually in the upper portion but at times in the lower abdomen. Rarely, when severe, it would radiate downward into the right testicle and be associated with nausea. Appendectomy had not influenced the pain. Gastrointestinal studies were negative. Examination revealed minimal tenderness over the right kidney, considerable tenderness in the lower right abdomen. Urine and plain x-ray were negative. Intravenous urography showed delay in excretion of dye by the right kidney with minimal dilatation of the pelvis. A later plate showed the ureter filled with dye from the kidney pelvis to bladder, its caliber being essentially normal. Cystoscopy revealed a ureterocele on the right with a tiny pinpoint orifice. Two instrumental dilatations of the lower ureter permanently relieved this pain.



Fig. 6. No. C 24717 had symptoms of bladder irritation for fifteen years, all symptoms being confined to the lower urinary tract. He was found to have a large bladder stone and cystitis. Intravenous urography showed obstruction to both ureters due to edema and thickening of the bladder mucosa and wall. Note dilatation and loss of segmental filling of ureters.

and the presence of dye in the bladder. (2) Dilatation of the calyces, pelvis, and ureter of the obstructed side may or may not be noted. (3) Segmental filling of the ureter above the point of obstruction is usually absent, and a solid column of radiopaque dye extends from the segment of ureteral obstruction upward to include the renal pelvis. Delayed plates may be necessary to illustrate this finding when obstruction to the transportation of the dye from the kidney pelvis down the ureter is pronounced. It should be emphasized that only one or two of these abnormalities may be demonstrable in the individual case of ureteral obstruction.

In instances of obstruction where, because of increased intraureteral pressure, the ureteral musculature cannot obliterate its lumen by peristaltic contraction, the entire lumen of the ureter and kidney pelvis above the obstructed point is an open system, and the increased pressure is equally distributed throughout it. The resulting pain pattern will radiate from costovertebral angle downward to a point determined by the level of obstruction. Renal tenderness will be present due to increased pressure within both the renal pelvis and the true capsule of the kidney, an organ which is

may be noted in cases of ureteral obstruction. (1) There may be delay in excretion of the radiopaque dye by the affected kidney so that in x-rays made five to ten minutes after administration of the mate-

richly supplied with sensory nerve fibers. Gastro-intestinal disturbances are frequently seen because of the intimate connection between the renal and other abdominal plexuses (Figs. 4, 5 and 6).

detrusor contraction through the hypogastric plexus (Figs. 7 and 8).

Typical ureteral pain radiates downward whether it originates in the costo-vertebral region, the

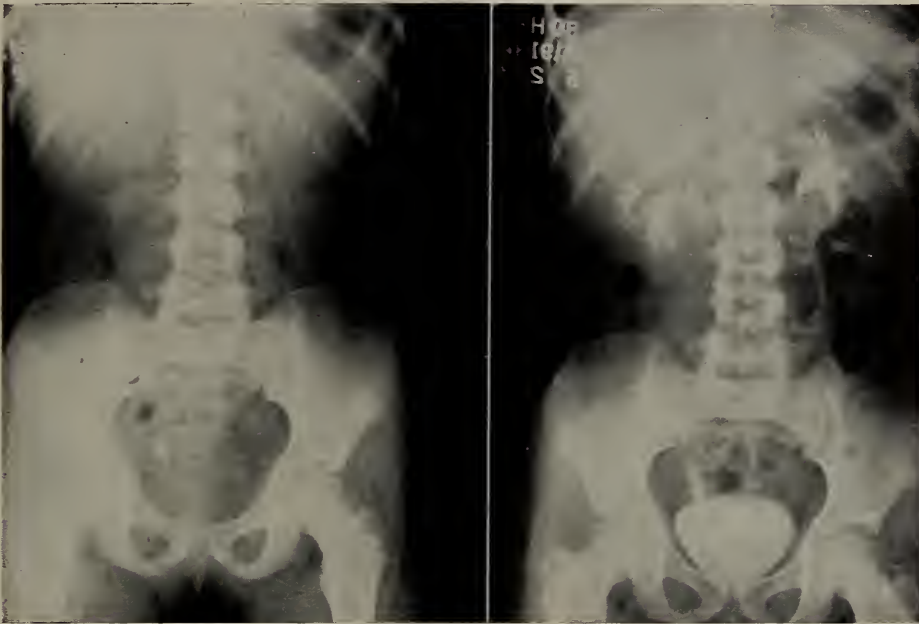


Fig. 7. No. A 19136. This seven-year-old girl, during the preceding four months, had had three separate attacks of severe right lower abdominal pain with nausea and vomiting. The pain was not experienced in the back or flanks. Examination revealed marked tenderness in the right lower abdomen and minimal tenderness in the right flank. The urine showed an occasional white blood cell, no red cells, no organism. X-rays showed a large oval stone in the lower right ureter. Immediately above the stone, the ureter was moderately dilated for a distance of 3 or 4 cm. Above this point, however, it was of normal caliber, and effective peristalsis was demonstrable on intravenous urography. There was no definite hydronephrosis. No further attacks occurred following removal of her stone.

In certain instances of partial low ureteral obstruction, the ureteral musculature may become compensated so that efficient peristalsis occurs in that portion above the obstructed segment. This fortuitous happening will result in quite different symptom complexes and in different physical and radiologic findings. Effective peristalsis above a partial obstruction protects the renal pelvis from back pressure. Accordingly, little or no dilatation of the pelvis or calyceal system is present and for the same reason, renal tenderness is absent. Excretion of intravenous dye is delayed little if any. Ureteral pain does not start in the costo-vertebral angle and kidney region but originates solely in the segment of ureter immediately above the point of obstruction in a manner analogous to segmental stimulation by Ockerblad's electrode. Gastro-intestinal symptoms are usually inconspicuous, as the hypogastric and vesical plexuses are not intimately connected with those governing gastro-intestinal motility. Reflex urinary frequency is often present, however, due to reflex stimulation of



Fig. 8. Low ureteral stricture on right with compensation of upper ureter. This type of obstruction may produce low abdominal pain with or without radiation. Note dilated segment of ureter immediately above stricture.

flank, or in a lower abdominal quadrant. Occasionally an individual is seen whose lower abdominal pain radiates upward toward the flank, and



subsequent correction of an obstructive condition in the lower ureter relieves the pain, thus proving its source to be ureteral. Such atypical spread of ureteral pain is difficult to explain. I wish, how-

contraction communicates with the obstructed segment. During such a phase, the elevated pressure in the lower ureteral segment would be transmitted in a retrograde fashion to the upper relaxing seg-

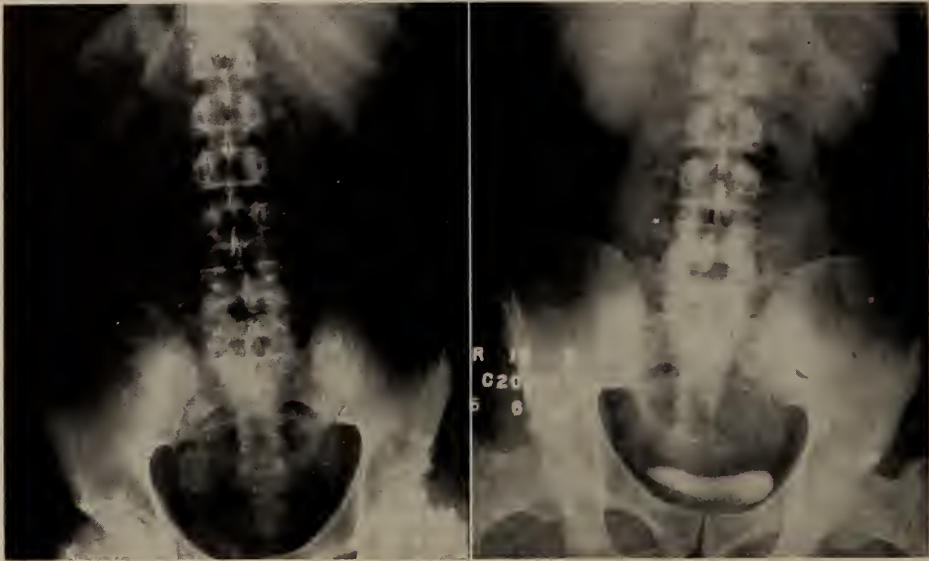


Fig. 9. No. C 20904 developed severe non-radiating pain in the right lower abdomen four hours before being seen in consultation. There was mild discomfort in the back and severe nausea and vomiting. Two urinalyses showed about 10 white cells per high power field and no red cells. White count was 11,000, temperature 37.4° C. Examination revealed definite tenderness to fist percussion over the right costo-vertebral angle and extreme tenderness on deep palpation of the right lower abdomen over McBurney's point. There was marked muscle spasm, whether involuntary or voluntary it was difficult to say. Rectal examination was negative. X-ray of the abdomen (Fig. A reversed) showed a tiny opacity 2 mm. in diameter in the region of the lower right ureter. Intravenous urography was performed immediately. There was fair excretion of dye by the left kidney and dye present in the bladder in twenty minutes but no evidence of excretion of dye by the right kidney. A diagnosis of ureterolithiasis, right, was made and the scheduled appendectomy cancelled. The following day, the patient was symptom-free, the urine showed 40 red cells per high power field, and only slight renal tenderness was present. Repeat plain x-ray and intravenous urography showed that the right kidney was functioning normally except for evidence of slight obstruction, as shown by absence of segmental filling of its ureter. Although no calculus was recovered, we felt confident that the patient had passed a stone.

ever, to suggest a possible explanation which, although difficult to prove, seems plausible to me. A gross example is seen in cases of vesico-ureteral reflux of urine. This condition is commonly seen in cases of incompetence of the uretero-vesical valve secondary to chronic renal infection or bladder neck obstruction. Retrograde injection of dye into the bladder in such instances will fill the ureters and pelvis of the kidneys. The same reflux occurs during micturition and produces pain radiating upward along the course of the ureters to the kidney regions because of transmission of elevated intravesical pressure to the upper urinary tract. It seems quite possible that a similar mechanism might come into play in certain instances of partial, compensated obstruction to the lower ureter. As a descending, effective peristaltic contraction is dissipated into the dilated uncompensated segment of ureter immediately above the obstruction, there must be a phase during which the lumen of the relaxing segment of ureter following the wave of

ment. Under such conditions, pain might well radiate upward.

The differential diagnosis between acute appendicitis and acute obstruction of the lower right ureter is often difficult and, at times, impossible. I have seen at least one patient from whom an acutely infected appendix was removed who, four hours after operation, passed a calculus from the lower right ureter. Nevertheless, urologic investigation may aid considerably in arriving at a correct diagnosis. The presence of microscopic hematuria is by no means infallible in differentiating between the two conditions. Occasionally urinalysis shows no blood even in the presence of an obstructing ureteral stone. In a recent review of 500 cases of acute appendicitis seen at Duke Hospital, Gardner found microscopic hematuria present in 5.8 per cent of the cases. The presence of peritoneal irritation, as demonstrated by true involuntary muscle spasm and rebound tenderness, is commonly seen in acute appendicitis whereas it is a very rare

finding in cases of ureteral obstruction. When present in such cases, it is due to peri-ureteritis with secondary peritoneal involvement, due usually to severe infection or trauma from instrumentation. Costo-vertebral angle tenderness is not seen in acute appendicitis unless the appendix is retrocecal and lies in close proximity to the ureter, causing partial obstruction by inflammatory changes. On the contrary, it is almost invariably present in cases of acute lower ureteral obstruction. The presence of nausea and vomiting is seen typically in both conditions, and the white blood cell count may be of little value in differentiation. I wish to point out the great value of x-ray and immediate intravenous urograms in the differential diagnosis between the two conditions. It is true that an occasional calculus in the ureter cannot be demonstrated by x-ray. In the vast majority of instances, however, calculi of pinhead size or larger can be visualized in a properly exposed plate. The best intravenous urograms are obtained only after proper preparation of the patient by restriction of fluid and cleansing of the bowel by cartharsis and enemata. Nevertheless, a great deal of information may be gained from this procedure when performed with no preparation whatsoever. If performed as an emergency, it adds no more than fifteen to thirty minutes to the patient's preoperative investigation and may be carried out simultaneously with other essential studies. The coexistence of evidence of ureteral obstruction on intravenous urography and the presence of an opacity however small, in the direct line of the ureter, is strong evidence in favor of a diagnosis of ureterolithiasis (Fig. 9).

Although atypical types of lower abdominal pain may arise from lesions in the bladder, posterior urethra, and trigone of both male and female, as well as from the prostate, seminal vesicles, and vasa in the male, these disorders will not be discussed at the present time. However, I do wish to discuss briefly that poorly understood condition, ureteralgia. The existence of such an entity is denied by some excellent urologists. By others, it is variously termed "ureteral stricture, spastic ureteritis, ureteral spasm, irritable ureter," et cetera. This condition is seen most frequently in the tense, often psychoneurotic female. Occasionally it is seen in the male. The absence of objective pathological findings is conspicuous. Such individuals complain of pain usually in one lower abdominal quadrant, colicky or dull aching in nature, ac-

centuated usually just before the onset of menstruation in the female. The pain is rarely experienced in the costo-vertebral region, but occasionally is felt in the sacro-iliac area. It is unaltered by pos-



Fig. 10. No. A 5236 had advanced carcinoma of the cervix. There had been no symptoms at all referable to the bladder nor had there been any pain in the abdomen or flank. Urologic investigation was carried out because of the discovery of a mass in the right upper abdomen which was proven to be kidney. Retrograde pyelograms demonstrated advanced hydronephrosis and hydro-ureter on the right side, with moderate obstruction of the left kidney and ureter secondary to cervical carcinoma.

ture, diet, or evacuation of the bowel but occasionally somewhat improved by emptying the bladder. Bladder symptoms are usually absent. Physical activity and particularly emotional upset are apt to aggravate the pain. On urological study, the urine is negative. Intravenous and retrograde pyelograms are perfectly normal in both the supine and upright positions. Retrograde pyelography, however, with over distention of the kidney pelvis and ureter, reduplicates the patient's pain exactly. Instrumental dilatation of the ureter often improves or completely relieves the pain for periods varying from a few days to years. The diagnosis of ureteralgia is made with reluctance and then only after a therapeutic trial of ureteral dilatations. It is our policy to explain to these patients that the reduplication of their pain by retrograde filling of the kidney pelvis and ureter may mean that these organs are the source of their discomfort. On the other hand, the discomfort may be arising in closely related structures. They are advised to submit to one or two instrumental dilatations of the ureter to see if improvement of their symptoms will oc-



cur. The mechanism of such pain is obscure. It is my belief that it is due to minimal ureteral obstruction, whether by spasm, a large calibered stricture, or by peri-ureteral pathology, I do not know. Nevertheless, I am convinced that such a syndrome exists.

In closing, I wish to point out that the severity of ureteral pain is by no means indicative of the seriousness of the causative condition. Many serious urologic diseases cause partial or complete ureteral obstruction with complete absence of pain. Infiltrating tumors of the bladder, carcinoma of the cervix, primary ureteral tumors, and retroperitoneal neoplasms characteristically obstruct the ureter without producing the slightest discomfort (Fig. 10). Earlier in this paper I have pointed out the fact that ureteral pain is due to relatively abrupt obstruction. With the slowly progressive encroachment on the lumen of the ureter by infiltrating tumors, the patient usually experiences little if any pain. In instances where complete ureteral obstruction occurs from occlusion of the ureter by a calculus, pain may be transient and after a few days disappear altogether, misleading the attending physician into believing that the calculus has been passed. Such relief from pain is actually due to cessation of peristalsis because of decompensation of the musculature of the ureter and kidney pelvis. In the chronically infected and dilated ureter, sensation is notoriously diminished. Ockerblad, in his clinical experiments, found that electric stimulation of such ureters produced no painful sensation whatsoever. Clinically, patients may pass calculi from a chronically infected kidney pelvis without discomfort. It is fully apparent, therefore, that the degree of pain secondary to pathology in the upper urinary tract by no means parallels the seriousness of the underlying condition.

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## Present Status of the Treatment of Peptic Ulcer

By Waltman Walters, M.D., Bradley C. Brownson, M.D., and Spencer K. Phillips, M.D.

Rochester, Minnesota



WALTMAN WALTERS

IN PAPERS<sup>2,6-11</sup> which one of us (W. W.) presented last year, the historical data, the anatomic studies of the vagi in 111 postmortem examinations and the results of vagotomy in the treatment of peptic ulcer in eighty-three cases in which operation had been performed at the Mayo Clinic up to January 15, 1947, were considered. The present series of 177 cases includes the eighty-three cases previously considered and an additional ninety-four in which operation was performed from January 15, 1947, through December 31, 1947.

In the 1947 papers the reasons for the opinion that the best approach to the vagus at the lower end of the esophagus was through an abdominal incision in most cases were explained. Among these reasons was that this approach allows exploration of the abdomen. Since then this opinion has been strengthened by observation in five cases in which the preoperative diagnosis of peptic ulcer was based on the clinical histories and roentgenologic findings. The presence of a peptic ulcer was not substantiated at operation, and hence, of course, vagotomy was not performed. If the thoracic route had been employed, the error of diagnosis would not have been detected and the results of vagotomy would have been improperly interpreted. Moreover, in ten cases in our series, associated abdominal lesions, such as cholelithiasis, Meckel's diverticulum or inflammation of the appendix, required removal in addition to the vagotomy for the peptic ulcer. These lesions would have been overlooked, and their removal would have been exceedingly difficult through a thoracic transdiaphragmatic approach.

In five of the seventy-seven cases in which one

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Dr. Walters is in the Division of Surgery, Mayo Clinic, and Dr. Brownson and Dr. Phillips are Fellows in Surgery, Mayo Foundation.

of us (W. W.) performed the operation (Series 1) recurrent ulceration has developed. In four of these five cases the results of insulin tests were negative. In the 1947 papers the recurrence of a large perforating gastric ulcer after transthoracic vagotomy and excision of the gastric ulcer was reported in a case in which insulin tests gave repeatedly negative results. Partial gastrectomy was later necessary to relieve the patient's symptoms. Recently a recurrent ulcer has been removed in a similar case in Series 1. Results of insulin tests were persistently negative in this case also. Recurring ulceration has been proved at operation in one of the cases and by roentgenologic demonstration of ulcer craters in two, making the total of five (6.5 per cent of the seventy-seven cases in Series 1). In addition, recurring symptoms of ulcer have developed in nine cases (11.7 per cent) in which one could not help considering the possibility of recurrence of the ulcer. In seven of these cases the result of the insulin test was negative, in one case it was positive, and in the remaining case the test was not done. This makes a total of 18.2 per cent of the seventy-seven patients who have had recurring symptoms of ulcer.

### Scope of This Paper

In this study an attempt has been made to evaluate the results of the series of 177 patients all of whom underwent operation at the Mayo Clinic, seventy-seven by one of us (W. W.; Series 1) and 100 by several colleagues interested in gastrointestinal surgery (Series 2). A follow-up study of these cases has been done by Neibling and one of us (B. C. B.) with the co-operation of the Division of Biometry and Medical Statistics.

As previously stated, nineteen of the seventy-seven patients of Series 1 returned for re-examination, and follow-up letters have been received from all but twenty-five of the 177 patients of Series 1 and 2. All the patients underwent operation for chronic peptic ulceration. The patients who underwent vagotomy for duodenal ulcer were selected from the group of 14 per cent of the patients with duodenal ulcer for whom operation rather than medical treatment was recommended, either because medical treatment had failed or because such complications as perforation, obstruction or bleeding were present. One hundred and nine of the 177 patients had duodenal ulcers, ten had gastric ulcers, four had both gastric and duodenal ulcers, twenty-four had anastomotic ulcers after gastroenteros-

tomy and thirty had anastomotic ulcers after partial gastrectomy.

Transthoracic vagotomy was done in twenty-eight cases: in five for duodenal ulcer, in twenty-two for gastrojejunal ulcer and in one case for gastric ulcer. With the exception of this last case all of these transthoracic procedures were done by our colleagues.

### Postoperative Course

The postoperative course in the majority of cases was not attended by any serious difficulty. The indwelling nasal gastric suction tube was always left in place from three to four days, and in recent months from four to five days. The most common difficulty encountered postoperatively was the presence of gastric retention. The most frequent disturbances were those due to decrease of motility of the stomach and upper part of the intestine. These symptoms were troublesome in the early postoperative period, during the first two weeks after operation, in ten of the seventy-seven cases in Series 1 and in nine of the 100 cases in Series 2. Disturbances of motility persisted from three and a half to eighteen months and caused symptoms which were disabling in six (7.8 per cent) of the seventy-seven cases in Series 1 and in eight (8 per cent) of the 100 cases in Series 2.

There were five hospital deaths in the series of 177 cases (2.8 per cent). One occurred an hour after operation from coronary sclerosis; one, four days after operation from either pulmonary or cerebral embolus; one, fourteen days after operation from an unsuspected subdiaphragmatic abscess following vagotomy and gastroenterostomy for duodenal ulcer, and two deaths from renal insufficiency. In one case in which death was due to renal insufficiency, vagotomy had been done for duodenal ulcer and cholecystectomy for cholelithiasis. The patient withdrew his gastric suction tube on the fifth day after operation. Twelve hours later he was found in a shocklike condition and on reinsertion of the stomach tube 1,600 c.c. of fluid were withdrawn. In the next twelve hours an additional 3,100 c.c. were withdrawn. This severe gastric retention persisted in spite of adequate replacement of the fluids lost. Anuria and uremia developed, and the patient died fifteen days after operation. In the second case of death from uremia, volvulus developed with perforation of the jejunum and peritonitis fourteen days after a second resection of the stomach for gastrojejunal ulcer. The



perforation was closed. Although the patient recovered from the peritonitis, he died from uremia fourteen days later. The value for blood urea before death was 342 mg. per 100 c.c.

An additional patient had had ileus five days after vagotomy and gastroenterostomy. At operation no mechanical obstruction was found. He recovered and returned home. However, volvulus of the terminal portion of the ileum with gangrene developed eleven months later and he died.

### Evaluation of Results

In calculation of the results, those cases were excluded in which no statement was made of the results obtained, as well as those in which no replies were received to the questionnaires and those in which death occurred in the hospital.

The results are arbitrarily divided into three categories: excellent, unsatisfactory and poor. The results were classified as excellent when there was relief of the pain and distress due to ulcer and when there were no symptoms of disturbance of motility. The results were considered unsatisfactory when the pain and distress persisted or recurred, or when there were troublesome symptoms of disturbances of motility, such as fullness, frequent belching of foul gas, diarrhea or nausea and vomiting. The results were considered poor in those cases in which there was recurrence of symptoms of ulcer and an ulcer crater was reported on roentgenologic examination or an ulcer was found at reoperation.

*Vagotomy without Other Surgical Procedures on the Stomach and Duodenum.*—It is in this group of cases, we believe, that the results of vagotomy can best be evaluated.

In seventy-four of the 177 cases in the total series vagotomy was performed without other surgical procedures on the stomach. In twenty-nine cases it was carried out for duodenal ulcer, in thirty-nine for jejunal ulcer and in six for gastric ulcer. In this group of seventy-four cases there were three hospital deaths and in two instances the result was unknown. In 80 per cent of the remaining sixty-nine cases the results were excellent, and in 19 per cent they were unsatisfactory. There was one poor result, recurrence of a bleeding jejunal ulcer. It is necessary, however, to divide these cases on the basis of the location of the lesion, for it is obvious that vagotomy for a duodenal ulcer

in which the entire secreting surface of the stomach remains, and in which atony of the stomach will develop, will have a different effect from vagotomy in other cases in which part of the stomach is removed or gastroenterostomy is performed.

In twenty-nine cases of duodenal ulcer (in the 177 cases) vagotomy was done without other surgical procedures. There were three deaths. For 65 per cent of the twenty-six patients who lived results were excellent and for 35 per cent they were unsatisfactory. All nine patients who had unsatisfactory results had troublesome disturbances of motility consisting of belching of foul-smelling gas, abdominal discomfort or diarrhea for an average of eight months. One patient required gastroenterostomy for relief of persistent gastric retention seven weeks after the transthoracic vagotomy. In eighteen of the seventy-seven cases of Series 1, vagotomy alone was performed for duodenal ulcer. There were two deaths. Excellent results were obtained in nine cases (56 per cent of the patients who lived) and unsatisfactory results in seven (44 per cent). These seven patients had both ulcer distress and troublesome disturbances of motility consisting of abdominal discomfort and belching of foul-smelling gas for periods of from four to fifteen months.

In the six cases in the whole series of 177 cases in which vagotomy alone was performed for gastric ulcer, results were excellent.

In two of the thirty-nine cases of gastrojejunal ulcer in which vagotomy alone was performed the results were unknown. In the remaining thirty-seven cases the results were as follows: in thirty-two cases (86 per cent) excellent, in five (14 per cent) unsatisfactory. In twenty-two of the thirty-nine cases of anastomotic ulcer vagotomy was done transthoracically. The results were unknown in two cases, but in sixteen (80 per cent) of the remaining twenty cases excellent results occurred and in four (20 per cent) persistent symptoms of ulcer or troublesome disturbances of motility continued and one patient has a recurring bleeding jejunal ulcer. In sixteen (94 per cent) of the seventeen cases in which vagotomy was done transabdominally, results were excellent but there was persistence of ulcer distress in one case.

Having given the results of vagotomy alone, for all types of lesions, we shall now consider primarily the condition and describe the results of vagotomy with or without other procedure. In order to make

our points it will be necessary occasionally to refer to certain data already presented.

*Gastrojejunal Ulcer After Gastroenterostomy.*—

In fourteen of the thirty-nine cases (entire series) of gastrojejunal ulcer for which vagotomy only was done the ulcers had followed gastroenterostomy. The results were unknown in two, but in ten (83 per cent) of the remaining twelve cases excellent results were obtained; results in the other two cases were unsatisfactory because of persistent ulcer pain in one case, and in the other because of persistent ulcer pain and symptoms of disturbed motility.

To this group of cases in which gastrojejunal ulcer followed gastroenterostomy and vagotomy alone was performed should be added ten cases. In four the gastroenteric anastomosis was disconnected, the gastrojejunal ulcers were removed, intestinal continuity was restored, and vagotomy was performed. Results were excellent in two cases in which results of insulin tests were negative and unsatisfactory in one owing to symptoms of disturbed motility. The results of the insulin test were positive in this case. In the fourth case a crater of a duodenal ulcer was demonstrated in the roentgenogram although the result of the insulin test was negative. In three other cases, pyloroplasty was done in addition to the procedures just described. In two of these three cases (67 per cent) results were excellent; the results of the insulin test were negative in one and the test was not done in the other. In the third case the old duodenal ulcer with a crater recurred. The results of the insulin test were positive in this case. In other words, in two of seven cases in which the jejunal ulcer and the gastroenteric anastomosis were removed together with re-establishment of normal gastrointestinal continuity and vagotomy, ulceration in the duodenum occurred after the operation. The percentage of recurrence in these cases is only slightly lower than it is in similar cases in which similar procedures were employed without vagotomy.

Among the cases in which gastrojejunal ulcer followed gastroenterostomy are four in which gastrojejunocolic fistulas were present. One of the patients was treated by vagotomy, excision of the gastrojejunal ulcer and disconnection of the gastroenteric anastomosis. The fistula also was excised, and the openings in the colon, jejunum and

stomach were closed. An excellent result was obtained during the following seven months and the patient gained 30 pounds (about 13.6 kg.). A negative result of the insulin test was obtained. In the other three cases the same procedures were done but a new gastroenteric anastomosis was made. All three patients recovered from their operations. One had an excellent result more than twelve months after operation. One died from coronary occlusion three months after operation but did not have any gastrointestinal symptoms. The third has not been heard from since dismissal. The insulin test was not done in any of these cases.

It is well to contrast these results in the treatment of gastrojejunal ulcer after gastroenterostomy in which vagotomy alone or in combination was done with those in which partial gastrectomy only was done. Priestley and Gibson have recently reported a study of 283 cases of gastrojejunal ulcer seen at the clinic from 1937 through 1942. Partial gastrectomy of the posterior Polya type was employed in 169 with a mortality rate of 2.9 per cent. In the series of cases in which the gastrojejunal ulcer was excised and partial gastrectomy of the posterior Polya type was performed, the results from five to ten years after operation in an unselected group of 103 patients were satisfactory in 87.4 per cent and unsatisfactory in only 12.6 per cent. These results practically parallel the shorter term results of vagotomy.

*Gastrojejunal Ulcer After Partial Gastrectomy.*

—The best results after vagotomy have occurred in a group of cases in which gastrojejunal ulcers had developed after partial gastrectomy. This group of patients has always been an exceedingly difficult one to handle, since the ulcer practically never heals under a medical regimen and the mortality rate after a second resection as reported by Priestley and Gibson was 11 per cent in a small series of eighteen such cases. It is interesting to note that slightly more than half of the eighteen patients obtained satisfactory results from a second resection of the stomach and removal of the gastrojejunal ulcer. It is in this group of cases that removal of a section of both nerves has been a great contribution to surgery.

In thirty cases vagotomy was performed for gastrojejunal ulcer after partial gastrectomy. There was one hospital death. This death occurred



in a case in which resection of the stomach with vagotomy was performed on our service. When the patient was about ready to return home, volvulus developed with perforation and peritonitis. The volvulus was corrected and the perforation was closed. Although the patient recovered from the peritonitis, renal insufficiency followed and the patient died from uremia twenty-eight days after the second operation.

In twenty-five of the remaining twenty-nine cases of gastrojejunal ulcer after gastrectomy, vagotomy only was done. In twenty-two (88 per cent) results were excellent and in three (12 per cent) there was some troublesome disturbance of motility. In one case excision of the ulcer, with plastic reconstruction of gastrojejunostomy was performed in addition to vagotomy with an excellent clinical result. In another case vagotomy, excision of the ulcer and removal of the gastrojejunostomy were done, with gastrointestinal continuity restored by a gastroduodenal anastomosis. This man had recurrence of ulcer distress. In two cases in which vagotomy and a second resection were performed, the results were excellent.

On August 24 one of us (W. W.) was asked to see a patient in whom a recurring ulcer with pain and bleeding developed after a Polya resection. Three months after transthoracic vagotomy a craterous jejunal ulcer with hemorrhage but without pain has appeared on roentgenologic examination. The patient has had one positive and one negative result of an insulin test within a week of each other.

*Duodenal Ulcer—Vagotomy and Gastroenterostomy.*—Gastroenterostomy in the treatment of chronic duodenal ulcer has been performed in numerous cases at the clinic during the past forty-two years.\* In 1946 partial gastrectomy was performed in 68 per cent of the cases of duodenal ulcer in which operation was performed, gastroenterostomy in 19 per cent and vagotomy in 10 per cent. In 1947 gastroenterostomy was performed in approximately 12 per cent, vagotomy in 15 per cent. This increase in the frequency of vagotomy was at the expense of partial gastrectomy, which in 1947 was employed in 62 per cent of the surgical cases of duodenal ulcer, and of gastroenterostomy.

In other words, gastroenterostomy has always been used in certain cases at the clinic in the treatment of chronic duodenal ulcer with satisfactory results, for as Balfour reported on many occasions, the incidence of recurring ulcer has not been more than 4.1 per cent in a large series of cases of duodenal ulcer in which gastroenterostomy has been carried out at the clinic. Follow-up studies have indicated that functional results of the operation have been excellent.

It is difficult, therefore, to evaluate the benefits of vagotomy in cases in which simultaneous gastroenterostomy and vagotomy were performed. However, this combined procedure was used in sixty-nine cases of duodenal ulcer. There was one death and in one case the result is unknown. Of the other sixty-seven patients, fifty-nine (88 per cent) had excellent results, whereas eight had persistent troublesome disturbance of motility, a complication which practically never occurs after a properly performed gastroenterostomy without vagotomy. A gastrojejunal ulcer developed in one of the eight cases.† The patient had disturbances of motility after vagotomy and anterior gastroenterostomy which necessitated jejunojejunostomy twenty-six days after operation. Although he was well for approximately nine months, a large gastrojejunal ulcer developed and perforated to the anterior abdominal wall. Partial gastrectomy eleven months after vagotomy was followed by an excellent result. In this patient the insulin tests gave persistently negative results.

In 87 per cent of the cases in which vagotomy and associated gastroenterostomy were carried out for duodenal ulcer, gastric acidity was reduced, whereas it was reduced in only 79 per cent of cases in which vagotomy only was done. In both groups 26 per cent of the patients had relative achlorhydria. This contrasts unfavorably with an incidence of relative achlorhydria in 73 per cent of cases in which partial gastrectomy of the posterior Polya type was performed for duodenal ulcer.

*Vagotomy, Pyloroplasty and Excision of Ulcer.*—In ten other cases of duodenal ulcer, pyloroplasty, excision of the ulcer and vagotomy were performed. The results were excellent in eight (80 per cent). Insulin tests gave negative results

\*In a paper presented at the meeting of the American Surgical Association in May, 1908, W. J. Mayo reported on 282 operations for ulcer of the duodenum. He had previously given a review of 500 cases of gastroenterostomy including pyloroplasty, gastroduodenostomy and gastrojejunostomy.<sup>3</sup>

†One of us (W. W.) has recently seen another patient who had undergone vagotomy in June, 1947. Gastroenterostomy was necessary in April, 1948, because of disturbance of motility and ulcer pain. The patient now has a gastrojejunal ulcer and the result of his insulin test is negative. Both operations were performed elsewhere.

in four, positive results in one, and in three cases tests were not done. In two (20 per cent) of the ten cases troublesome fullness and diarrhea occurred. The insulin test gave a negative result in one case and was not done in the other.

*Gastric Ulcer.*—It is our belief that the best surgical treatment of chronic gastric ulcer is partial gastrectomy, for it removes the lesion, which has at least a 20 per cent chance of being malignant. The hospital mortality rate after this operation in our experience was low, 1 per cent in ninety-eight cases in which this operation was employed at the clinic in 1946, and 0.8 per cent for 116 cases in 1947. The results of partial gastrectomy for chronic gastric ulcer are excellent. In fact we have never encountered a recurring ulcer after properly performed gastrectomy for benign gastric ulcer. Partial gastrectomy also accomplishes a wide removal of the stomach beyond the lesion if it is malignant. We felt it advisable, however, to try to determine the effect of vagotomy in certain cases of chronic gastric ulcer in which the operation seemed suitable, providing that we removed the gastric ulcer or determined that it was not malignant. Accordingly, vagotomy was performed in ten cases of chronic gastric ulcer; nine of the ten operations were done by the senior author. In three of the nine cases the ulcer was excised because of its large size and appearance; in six the ulcer was small and was not removed. In these six cases excellent results were obtained. In two of the three cases in which a large perforating benign gastric ulcer was excised and vagotomy was performed, large recurring ulcers developed. In both cases the insulin test gave persistently negative results. In one of these cases the recurring benign gastric ulcer with a crater approximately 3.5 cm. in diameter was removed later in the course of subtotal gastrectomy. It was located on the posterior gastric wall opposite the cardia and all of the stomach except the fundus was removed. Grossly the lesion looked malignant but multiple blocks from the ulcer when examined microscopically showed it to be benign. The other case of chronic recurring gastric ulcer, necessitating partial gastrectomy, has been reported previously.<sup>6,8-11</sup> The third patient has had a return of his ulcer distress, and there was a question of recurrence of gastric ulcer. He likewise has had a persistently negative result of the insulin test.

### Hollander Insulin Test as Index of Completeness of Vagotomy

If it is assumed that the Hollander insulin test is an indication of the completeness with which resection of the vagus nerves has been done, the relationship of this test to the results that occurred in this group of cases must be determined.

Miller and Olwin, in reporting on 101 cases, indicated that results of vagotomy were as good in the cases in which the results of insulin tests were positive as in those in which they were negative. This has been our experience also. Insulin tests were made in sixty-two of our seventy-seven cases (Series 1). They gave negative results in 74 per cent of these cases. In thirty-three (72 per cent) of forty-six cases in which the results of the insulin tests were negative, results of vagotomy were excellent, whereas in twelve (75 per cent) of sixteen cases in which the results of insulin tests were positive, the results of vagotomy were excellent.

In thirty-two (73 per cent) of the forty-four cases in which the results of insulin tests were negative and determinations of acidity were made, acidity was reduced, and in twelve (86 per cent) of the fourteen cases in which results of the insulin tests were positive and determinations of acidity were made, acidity had decreased. Moreover, the disturbances of motility after operation occurred in 28 per cent of the negative group and in 25 per cent of the positive group. Lastly, four of the patients who had proved recurrence of ulceration, and seven of the nine who are suspected of having persistent or recurrent ulceration, gave negative results to insulin tests. It seems to us, therefore, that the Hollander insulin test does not indicate the completeness of the vagotomy or, if it does, that a complete vagotomy may not be necessary to accomplish the desired beneficial results from the operation; or that the benefits of vagotomy combined with gastroenterostomy or partial gastrectomy are due to these latter procedures and not to the vagotomy.

### Comment and Summary

The results of follow-up studies in 177 cases in which vagotomy was performed alone or in combination with other operations on the stomach or duodenum are reported. In seventy-seven of these cases (Series 1) the operation was performed by the senior author and in the other 100 (Series 2) by his surgical colleagues at the Mayo Clinic who



are interested in the surgical treatment of gastrointestinal lesions.

The operation seems clearly indicated in cases of recurring ulceration after partial gastrectomy. It has given excellent results which compare favorably during a two-year period of observation with the five-year and ten-year results after partial gastrectomy for gastrojejunal ulceration following gastroenterostomy. The results of vagotomy for duodenal ulcer when the operation is combined with gastroenterostomy seem little better than when gastroenterostomy is performed alone. The same may apply to cases in which pyloroplasty with removal of the duodenal ulcer is accompanied by vagotomy.

In a series of cases of gastrojejunal ulcer recently reported by Priestley and Gibson, the average interval between operation and the development of gastrojejunal ulcer was about three and a half years. It is obvious, therefore, that a longer interval must elapse than has elapsed in our series of cases in which vagotomy and gastroenterostomy have been performed before it can be determined whether or not vagotomy added to gastroenterostomy is followed by better results and a lower incidence of recurring ulceration than is gastroenterostomy alone.

It has seemed to us that the best way to determine the results of vagotomy in the treatment of duodenal ulcer, therefore, is to study that group of cases in which vagotomy alone was performed without other operations on the stomach which would tend to promote gastric emptying, decrease the amount of gastric secretion and reduce the acidity of the stomach either by the reflux of alkaline duodenal and biliary secretions through the gastroenteric stoma or by removal of part of the secreting surface of the stomach as in partial gastrectomy. In the sixteen cases of the seventy-seven cases of Series 1 in which vagotomy was done without other surgical procedure in the treatment of duodenal ulcer and the patients survived operation, nine (56 per cent) excellent results and seven (44 per cent) unsatisfactory results were obtained. All the patients with unsatisfactory results in both series had both ulcer distress and troublesome disturbances of motility consisting of abdominal discomfort, belching of foul-smelling gas and diarrhea for periods of from four to fifteen months. Moreover, in comparing either of the procedures with partial gastrectomy for duodenal ulcer it is

interesting to note that in 296 cases in which partial gastrectomy was performed at the clinic in 1946 for duodenal ulcer there was a mortality rate of only two per cent. In 1947 it was 0.7 per cent for 275 cases,\*\* and the long-term results in many large series of such cases reported by numerous observers have been excellent in from 80 to 85 per cent of cases, good in 10 per cent and poor with recurring ulcer in only 2 per cent.

In the treatment of chronic gastric ulcer it is our opinion that partial gastrectomy with removal of the ulcer is the best surgical procedure to employ because of the 20 per cent chance of the lesion being malignant and because of the excellent results and absence of recurrence of ulceration that follow this operation. In ninety-eight cases in which partial gastrectomy was performed at the clinic in 1946 for gastric ulcer the hospital mortality rate was 1 per cent. In 1947 there were 116 resections with a mortality rate of 0.8 per cent.

In spite of this we determined to try the effects of vagotomy in a few suitable cases of gastric ulcer. In six of the cases in which the ulcer was small the results were excellent. In two other cases large recurring perforating gastric ulcers developed which necessitated subtotal gastrectomy. In both cases results of insulin tests were negative. Both lesions were reported to be benign after detailed pathologic examination. In a third case symptoms indicate recurrence.

In the series of 177 cases in which vagotomy was done with or without other gastric operations late results were considered excellent in 79 per cent of the cases. There were five hospital deaths or a mortality rate of 2.8 per cent. Disturbances of motility occurred in the immediate postoperative period in nineteen cases and in fourteen persisted for three and a half to eighteen months. However, in the seventy-seven patients of Series 1, who have been personally and individually studied, five patients (6.5 per cent) had proved recurring ulcers and in addition nine (11.7 per cent) had recurrence of the symptoms of ulcer and one could not help considering the possibility of recurrence of the ulcer. The total of these showed an incidence of 18.2 per cent of patients who had had a persistence or recurrence of their ulcer symptoms. In eleven

\*\*There were twenty-three additional cases with associated gastric and duodenal ulcers in which partial gastrectomy was performed with one hospital death, eleven cases of acute perforating duodenal ulcer, seven cases of an additional operation such as cholecystectomy with partial gastrectomy and five cases of active duodenal and gastrojejunal ulcers, making a total of 321 cases of partial gastrectomy with four deaths, a mortality rate of 1.2 per cent.

of these fourteen cases in which insulin tests were made after operation results were negative.

Attention also should be directed to a group of seven cases of gastrojejunal ulcer after gastroenterostomy in which the gastroenteric anastomosis and the gastrojejunal ulcers were removed, continuity of the gastrointestinal tract was restored and vagotomy was performed. Two of the patients later had abdominal pain, loss of appetite and weight, and craters of duodenal ulcers were seen on roentgenologic examinations months later. This incidence of recurrence is only slightly lower than it is when the same procedures are employed without vagotomy.

Hollander insulin tests were made in sixty-two of the seventy-seven cases of Series 1. They were negative in 74 per cent of these cases. Relief of pain of ulcer, reduction of gastric acidity, dilatation of the stomach and persisting postoperative disturbance of motility were about the same in cases in which results of the insulin test were negative as in those in which they were positive. However, the patients who had proved or suspected recurrence of ulcer were practically all in the insulin-negative group! It would seem that the Hollander insulin test does not always indicate the completeness of vagotomy, or that complete vagotomy is not necessary in every case to accomplish relief of pain and other desirable results.

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## Vagotomy for Peptic Ulcer

By John E. Summers, M.D.

Norwalk, Connecticut

WITH THE INCREASING incidence of peptic ulcer<sup>69,87</sup> and the relatively poor methods of treatment for it available at the present time, many physicians are now investigating a new method of treatment for peptic ulcer, i.e., vagus nerve resection. Few new operative procedures have been seized upon with such widespread enthusiasm as has vagotomy for the treatment of peptic ulcer.

### Historical

Vagus nerve section, usually partial, has been performed sporadically for many years for a variety of abdominal conditions.<sup>7,8,10,11,19,34,42,43,45,48,49,62,63,76,78,89,92</sup> Complete section of both vagus nerves for peptic ulcer has been popularized in this country by Dragstedt and associates.<sup>14,15,16,17,18,23</sup> Following Dragstedt's initiative, vagus nerve resection for peptic ulcer was rapidly taken up by many outstanding surgeons.<sup>3,11,21,22,39,52,53,54,55,56,58,71,74,82,84,85,86,90</sup>

### Present Methods of Treatment of Peptic Ulcer

Whereas the proper medical management of the patient will usually allow the ulcer to heal,<sup>46</sup> a surprisingly large percentage of patients will eventually require operation for intractability, hemorrhage, perforation or obstruction.<sup>27</sup>

As for the operative procedures employed to deal with peptic ulcer, gastroenterostomy is followed, in a prohibitive number of cases, by the development of a jejunal or marginal ulcer.<sup>5,28,59,68</sup> The best surgical procedure so far developed is subtotal or partial gastrectomy, whereby most of the acid-bearing area of the stomach, the antral mucosa and the ulcer are removed.

Subtotal gastrectomy is generally approved as the best method of treatment for chronic gastric ulcer, not only because of the low postoperative mortality rate and the high percentage of cures following it, but also because of the predelection of prepyloric ulcers to undergo carcinomatous degeneration.<sup>2,94,37,38,67</sup>

Partial gastrectomy for duodenal ulcer is not an

Dr. Summers is Chief Resident, The Norwalk Hospital.



entirely satisfactory procedure because of the magnitude of the operation, the mortality rate, the development of jejunal or stomal ulcers, nutritional disturbances and the frequent occurrence of the "dumping syndrome."<sup>1,3,9,28,36,38,4,147,72,81,8,790,93</sup> Allen,<sup>3</sup> expressing the opinion of many surgeons, states: "It has always seemed probable that a more satisfactory and less radical method of dealing with duodenal ulcer than subtotal gastrectomy would eventually be found."

### Anatomy of the Gastric Nerves

As it has become evident that all of the fibers from both vagus nerves to the stomach must be interrupted if the gastric secretions are to be reduced sufficiently to allow healing of the ulcer,<sup>35,88</sup> several extensive investigations have been carried out concerning the gross anatomy of the vagus nerves as they pass through the esophageal hiatus to the stomach.<sup>9,12,15,51,82,83</sup> From these dissections of cadavers and studies at necropsy it has been found that in 85 to 90 per cent of the cases the vagus nerves reform, from the esophageal plexus, into two trunks, a anterior (the left vagus) and a posterior (the right vagus), which pass through the esophageal hiatus, closely applied to the esophagus, to the stomach. In 10 to 15 per cent of the dissections the vagus nerves passed through the esophageal hiatus in a more complicated fashion, i.e., as three or more trunks.

### Physiology of Gastric Secretion

The gastric glands, containing the chief and parietal cells, occur over the entire surface of the stomach, except the cardia and the pylorus. The parietal cells secrete hydrochloric acid while the chief cells secrete pepsin.<sup>29</sup>

Stimulation of the vagus nerves causes an increase in the secretion of hydrochloric acid and pepsin by the glands of the stomach, while section of the vagi causes a decrease in these secretions.<sup>6,10,22,24,32,35,79,85,88</sup> The sympathetic division of the autonomic nervous system is antagonistic to the action of the parasympathetic (the vagus nerves in this instance). The afferent (sensory) fibers to the abdominal viscera run through the sympathetic division of the autonomic nervous system.<sup>66</sup> There are three phases to gastric secretion:<sup>61,65</sup>

1. The cephalic (psychic) phase. (Operates through the vagus nerves.)
2. The gastric phase. (Begins when the food en-

ters the stomach; caused by "gastrin" elaborated by the prepyloric (antral) mucosa.)

3. The intestinal phase. (Supervenes when the food enters the intestine; the intestinal mucosa elaborates hormones which acts on the gastric mucosa.)

### Cause of Peptic Ulcer

The diversion of the alkaline secretions of the duodenum (the bile and pancreatic juices) into the ileum (such an experimental animal is called a Mann-Williamson dog) permits the development of a peptic ulcer in the jejunum.<sup>44,57</sup> The parenteral administration of histamine, (as histamine-beeswax mixtures) by causing hyperacidity in the stomach through the local action of the histamine on the gastric glands, causes peptic ulcer to develop.<sup>13,25,41,50,64,80</sup> Extensive burns cause duodenal ulceration (Curling's ulcer).<sup>26</sup>

It is generally accepted, and treatment is predicated on the idea, that gastric hyperacidity is the cause of peptic ulcer.<sup>57,65,73,87</sup>

Vagus nerve section in the Mann-Williamson dog does not prevent ulcer formation.<sup>60,75</sup> Neither will vagotomy protect an animal against the peptic ulcer produced by the parenteral administration of histamine.<sup>77,87</sup> This experimental work does not preclude vagus nerve section being of value in the treatment of human peptic ulcer.

Complete section of both vagus nerves eliminates the cephalic (psychic) phase of gastric secretion.<sup>6,10,14,15,16,17,18,23,24,30,35,52,61,65</sup> All of the branches of the vagus nerves to the stomach must be sectioned to secure this effect.

### Operative Technique

The operation of vagus nerve section for peptic ulcer is relatively simple.<sup>16</sup> The abdomen is entered through a high left paramedian incision. The left triangular ligament of the liver is sectioned and the left lobe of the liver is retracted to the right. The esophageal hiatus is revealed by incising the peritoneum over the esophagus below the diaphragm. The finger is introduced over the esophagus into the hiatus and in the posterior mediastinum and by careful finger dissection the esophagus is mobilized and pulled downward for 2 or 3 inches. With traction on the esophagus the vagus nerves can be felt as cords; by finger dissection they are separated from the esophagus, ligated with a nonabsorbable suture, divided, and a short segment of each is

excised. The importance of getting all of the vagus trunks as they pass through the hiatus has been shown. If pyloric obstruction is present, a gastroenterostomy must also be performed.

Two postoperative complications occurring after complete vagus nerve section are delayed emptying of the stomach and diarrhea. The former is treated by gastric suction for several days after the operation; the latter is self-limited, spontaneous recovery accompanying the readjustment of the motor activity of the stomach and intestines.

### Results of Vagus Nerve Section for Peptic Ulcer

Dragstedt and associates<sup>15</sup> state that 300 patients have had bilateral vagus nerve resection and, "The clinical results have been so satisfactory and the complications so transitory and inconsequential that this method has very largely replaced all other types of surgical treatment for this disease in this clinic." They<sup>16</sup> reported on 160 patients who were operated upon between January 18, 1943, and January 1, 1947: 142 patients proved, by a marked decrease in the total hydrochloric acid output from the stomach and by the insulin hypoglycemia test,\* to have complete interruption of the vagus nerves to the stomach. Of the eighteen patients in which section of the vagus nerves was not complete, five have not been helped by the operation. Dragstedt now prefers the abdominal approach to the vagus nerves because about one-third of the patients operated upon require a posterior gastroenterostomy.

Walters and associates<sup>84</sup> reported eighty-three patients who had had vagus nerve resection for peptic ulcer. While Walters states, "Our studies on section of the vagus nerves indicate that the results are inconstant, variable, and, in most cases, unpredictable," a careful study of the case histories,<sup>85</sup> considering the number of complicated cases and possible incomplete vagus nerve resections, indicates that the results appear to be favourable.

More<sup>53</sup> reported on seventy-four patients who had had vagus nerve resections for peptic ulcer. Satisfactory results have been obtained in 90 per cent of the cases. More<sup>54</sup> prefers the transthoracic approach to the lower esophagus, as this permits a more thorough dissection of the vagus nerves. Only two postoperative gastroenterostomies have been required in his series.

\*Insulin is given to lower the blood sugar to 50 mg./100 c.c. The hypoglycemia so induced stimulates the vagal centers in the medulla. The vagus nerves act on the gastric glands to increase gastric acidity which is determined by intermittent gastric aspirations.<sup>30</sup>

Grimson and associates<sup>21</sup> reported fifty-seven patients wherein the vagus nerves had been resected through the thoracic approach. While he stated that most of the patients (forty-eight in number) were satisfied after the operation, and, that "with very few exceptions healing or quiescence of the ulcer occurred," he does not recommend vagotomy alone for duodenal ulcer: "At the present time we are employing subdiaphragmatic vagotomy with pyloroplasty, exclusion or gastrojejunostomy for duodenal ulcer, reserving transthoracic vagotomy alone for stomal ulcer."†

Thorlakson† on the basis of thirty-nine patients who had undergone vagotomy for peptic ulcer, reported very satisfactory immediate results, as did Miller† from observations of forty patients, and Griswold† from thirty-four personal cases.

Sanders<sup>74</sup> reporting the results from vagus nerve resection for peptic ulcer in fifty patients, states, "On the whole, we have, thus far, been most pleased with our results of vagal resection."

### Summary

The problem of peptic ulcer in general, and that of duodenal ulcer in particular, has not been solved.

Subtotal (partial) gastric resection is the best method of treatment for chronic gastric ulcer.

Vagus nerve resection, by interrupting the cephalic (psychic) phase of gastric secretion, diminishes the acidity of the gastric secretions. This is of great importance in the human where the psychic phase predominates. Inasmuch as hyperacidity is the cause of peptic ulcer, especially of duodenal and stomal or jejunal ulceration, vagus nerve section rests upon a sound physiological basis.

The clinical results reported from vagus nerve section for peptic ulcer are, for the most part, unusually favorable.

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# Treatment of Tinea Capitis in General Practice

By Lee Carrick, M.D.  
Detroit, Michigan

DURING RECENT YEARS ringworm of the scalp has become epidemic.<sup>3</sup> The causative fungus in most cases has been *Microsporon audouini*, the "human type," so-called because it is not transferable to animals. These *M. audouini* infections have been notoriously refractory to the methods of topical therapy usually employed for ringworm. Therefore, many cases have received inadequate treatment or have had to be referred to the dermatologist or roentgenologist for low voltage roentgen epilation of the scalp.

Since most children affected with tinea capitis are first diagnosed and treated by the general practitioner, it is desirable that an effective method of local therapy be available to him. In this way he will secure a higher percentage of cures, the epidemic of tinea capitis will be controlled more rapidly, and only the very recalcitrant cases will need to be referred for low voltage roentgen epilation.

It was with these ideas in mind that several new chemical compounds have been developed for the local therapy of tinea capitis due to *M. audouini*.<sup>2,4,7</sup> Between 1944 and 1946 the *in vitro* and *in vivo* fungistatic and fungicidal effects of a copper oleate ointment and two fatty acid ointments were studied at the Dermatology Out-Patient Clinic, City of Detroit Receiving Hospital. The therapeutic value of one of the fatty acid preparations (undecylenate-undecylenic acid ointment: Table I) was significant enough to warrant its further trial in private practice. It was hoped that parental care and co-operation among private patients would be of a higher degree than the clinic level and thus permit a more accurate evaluation of the ointment being tested.

**Epidemiology.**—During a two-year period beginning in June, 1946, I diagnosed ninety-eight cases of tinea capitis under the Wood light in my office. One case was found on culture to be due to *Microsporon lanosum*, and one was caused by *Trichophy-*

TABLE I. UNDECYLENATE-UNDECYLENIC ACID OINTMENT TESTED IN LOCAL THERAPY FOR TINEA CAPITIS \* (pH 6.90)

Undecylenic Acid .....	5.00%
Triethanolamine-technical .....	1.75
Zinc Undecylenate .....	20.00
Sodium Tetradecyl Sulfate** .....	3.00
Anhydrous carbowax base to make .....	100.00

\*Supplied for clinical trial by Wallace and Tiernan Products, Inc., Belleville, N. J.

\*\*A wetting agent, to enhance penetration.

TABLE II. DISTRIBUTION OF CASES BY AGE AND SEX

Age, Years	No. Cases	Male	Female
1	1	1	0
2	4	3	1
3	9	6	3
4	12	10	2
5	13	9	6
6	9	0	0
7	17	13	4
8	16	12	4
9	5	4	1
10	5	4	1
11	1	1	0
12	4	3	1
Total	98	75	23

TABLE III.

Sex	Hair Line		Vertex		Generalized	
	No. Cases	Per Cent	No. Cases	Per Cent	No. Cases	Per Cent
Male	51	68	3	4	21	28
Female	11	48	7	30	5	22

*ton granulosum*. The remainder were all caused by *Microsporon audouini*. All patients were Caucasian. Their ages ranged from one to twelve years, the most frequently affected age groups being three to eight years inclusive. Seventy-five boys were affected as compared to twenty-three girls, the ratio of boys to girls being approximately 3:1. (Table II).

The distribution of cases by sex and location of lesions on the scalp are shown in Table III. The high percentage (68 per cent) of hairline involvement (temporal and/or occipital) in boys agrees with similar findings in previous reports.<sup>3,4</sup> The more frequent appearance of scalp ringworm in boys, plus their greater tendency for infection in the "clipper areas" around the hairline, would point toward unsterilized barber instruments as probably the most important single means of spreading ringworm of the scalp. A recent survey of barber shops by the officers of the U.S. Public Health Service in Hagerstown, Maryland, disclosed many instances of fungus-infected hairs on combs, brushes, scissors, and electric clippers.<sup>2</sup>

**Local Therapy.**—To insure accurate evaluation of the undecylenate-undecylenic acid ointment, only those cases of tinea capitis were included in

From the Department of Dermatology and Syphilology, service of Dr. Loren W. Shaffer, professor, Wayne University College of Medicine, and City of Detroit Receiving Hospital.



the treatment series which were caused by *M. audouini* and were completely free from kerion or other evidences of secondary infection. This was done because many cases of tinea capitis due to *M. audouini* complicated by secondary infection will heal without resort to x-ray epilation, i.e., by antiseptic topical remedies alone.<sup>6</sup>

In the present study, no patient was included in the treatment series who failed to continue under treatment for at least four months. This was considered the minimum length of time necessary to evaluate the therapeutic effect of the ointment being tested.

The following printed directions for home care were given to the mother of each patient:

#### *Home Care for Ringworm of the Scalp*

This disease is contagious to other children. Because of this, bring all other children in your family who are under fourteen years of age to the office for examination. The patient should not go to the barbershop. He should wear a clean stocking cap at all times, even to bed and while in school. As a precaution, any children in the family who do not have ringworm of the scalp should be cautioned against using the patient's comb, brush or cap, and he should sleep alone if possible. Brush or vacuum your overstuffed couches and chairs to remove any infected hairs which may be clinging to them.

Please live up to these rules and help to stamp out this disease. The average case of ringworm of the scalp seen during this epidemic usually requires several months to get well. Careful attention to the above directions and regular attendance at the office are essential for cure.

#### *Treatment*

1. When you get the child home, shave the *entire* scalp. Handclippers may be used first if available. Be sure to boil the instruments for fifteen minutes after use. Cut a hole in a newspaper and place it on the child's shoulders to catch the hairs as they are shaved off. The hairs and newspaper should then be burned. The scalp should be shaved once a week.

2. At bedtime shampoo the scalp with the soap provided. It is helpful to gently massage the shampoo into the scalp with a soft brush—a used tooth brush is suitable. Then rinse and dry well and apply the salve to the *entire* scalp, rubbing it in well, especially on the patches of ringworm.

3. Then apply a clean stocking cap and put the child to bed. Four or five stocking caps should be made up so that a clean cap is always available. After using the cap it should be put in boiling water for fifteen minutes before washing. The child should be cautioned to leave the cap in place once it is put on. If this rule is not observed, the ringworm may be spread from one patch to a normal area of the scalp and thus defeat the purpose of this treatment.

4. The next morning shampoo the scalp again and re-apply the salve. Put on a clean stocking cap. The child should wear this all day long, even while in school. In cold weather an ordinary cap may be worn over the stocking cap. Repeat this treatment every evening and morning.

5. On arising, the morning the child is brought to the office, the scalp should be shampooed and *no* salve applied. This is important so that adequate examination under the Wood light may be made.

In all cases it was recommended that the scalp be shampooed with a soap substitute, Phisoderm\* (oily type) because of its slightly acid pH and lathering qualities. The alkalinity of tincture of green soap and most toilet soaps makes them unsuitable as cleansing agents in tinea capitis since the fungus thrives on an alkaline medium.

In most cases the mothers were advised to apply strips of adhesive tape to the areas of ringworm daily. These were removed after one half to one hour, pulling out a few infected hairs each time. The healing time was undoubtedly hastened by this type of manual epilation. Instead of using the tape, some mothers purchased a Purple-X Bulb† for use in a dark room at bedtime (after the shampoo, but before the ointment was applied) to enable them to see the fluorescent infected hairs. In this way they were able to pluck a few infected hairs with tweezers each evening. The manual epilation is painless since the infected hairs are very loose and are easily removed.

Every child of school age was given a note for his school nurse stating that he could attend school providing he wore a stocking cap at all times and remained under treatment. In this way the child was able to continue his schooling without fear of contagion to his classmates. Occasionally a mother would report that her child was "sensitive" at first about wearing a stocking cap in school, but he would rapidly overcome this feeling and would co-operate well.

The importance of shaving the *entire* scalp was stressed at the time of the first office visit. It was explained to the mother that the ointment could be more easily applied well into the *entire* scalp, the scalp could be washed as easily as washing the face, it could be dried thoroughly, and the stocking cap could be kept more securely in place.

*Results.*—Of the ninety-six patients with tinea capitis due to *M. audouini* diagnosed during a two-

\*Winthrop-Stearns Co., Inc., New York, N. Y.

†General Electric Company, Schenectady, N. Y.

year period, fifty-five had no kerion, or other forms of secondary infection, and remained under treatment for a period long enough to permit accurate evaluation of the undecylenate-undecylenic acid ointment (at least four months).

Every child was examined under the Wood light at three-week intervals. A patient was considered "cured" if his scalp showed no fluorescent hairs under the Wood light for two consecutive weeks, and the "number of days under treatment" were counted up through the end of this period. The shaving of the scalp and the application of the ointment were then discontinued, and the mother was instructed to simply shampoo the scalp daily. If at the end of an additional two weeks' period (total observation period four weeks) the scalp was still negative under the Wood light the child was classified as cured.

"No improvement" was used to describe a case of tinea which exhibited as much involvement and brightness of fluorescence under filtered ultraviolet radiation as it did before treatment was begun.

As shown in Table IV, fifty-four children (98 per cent) were completely cured after an average of 144 days (twenty and one-half weeks) of treatment with the undecylenate-undecylenic acid ointment. The shortest period of treatment needed to produce a cure was fifty-three days (seven and one-half weeks) while the longest period was 308 days (forty-four weeks). The latter case was a ten-year-old boy whose mother had a fear of x-ray epilation and was willing to continue local treatment as long as necessary. The infected hairs showed no change in fluorescence during the first seven months of treatment. Then the fluorescence became duller and new, non-infected hairs began to appear. From then on recovery was fairly rapid.

Table IV also shows one case (2 per cent) which failed completely after 189 days (twenty-seven weeks) of treatment. This was a four-year-old girl whose mother gave her excellent nursing care and followed instructions faithfully. The reason for her failure to respond to treatment is unknown.

#### Comment

It is hoped that the foregoing method of local therapy for tinea capitis will provide the general practitioner with a practical approach to the problem of control of this disease. Parents, teachers, and school nurses do what they can to discover the

TABLE IV. SUMMARY OF RESULTS OF TREATMENT OF TINEA CAPITIS DUE TO *M. AUDOUINI* WITH UNDECYLENATE-UNDECYLENIC ACID OINTMENT

	No. Cases	Mean No. Days Treatment
Cured: .....	54 (98%)	144 (20½ weeks)
No Improvement: ..	1 (2%)	189 (27 weeks)

presence of scalp ringworm. Its therapy rests with the physician—preferably the family physician—whose advice is usually the first to be sought.

Some parents have a fear of x-ray epilation as a form of treatment for tinea capitis. Also, in younger children it is often impracticable to attempt x-ray epilation unless a general anesthetic is used. In these groups local therapy is mandatory if any treatment at all is to be given.

For those physicians who may use the method of treatment presented in this paper, a few points should be emphasized if the treatment is to be successful:

1. At the time of the first office visit, a thorough examination of the child's scalp should be made under a Wood light in a darkened room. Other susceptible children in the family should be examined also.
2. If laboratory facilities permit, one or two infected hairs which fluoresce under the Wood light should be extracted with a sterile thumb forceps and plated on Sabouraud's dextrose or maltose agar for positive identification of the offending fungus.
3. A mimeographed copy of the "Home Care for Ringworm of the Scalp" instruction sheet should be provided, and its contents should be discussed in detail with the parent.
4. The parent should understand that four or five months of treatment and observation will be necessary, although some cases heal sooner. Also, the parent should not expect to see a remarkable degree of improvement under Wood light examination at the time of the second office visit. Less fluorescence of the infected hairs is all that can be expected in the beginning. She should understand that improvement is gradual and often slow. In many cases little progress appears to have been made until after two or three months of treatment. Then, surprisingly enough, the next office examination may reveal only three or four "positive" hairs under the Wood light. As more and more cases are treated and cured, the physician



becomes more confident in predicting how rapidly a given case will respond to treatment.

5. No child should be dismissed as cured until his scalp is completely negative (i.e., not a *single* fluorescent hair is seen) under Wood light examination on two occasions four weeks apart.

Some progressive communities have school-health programs which include periodic Wood light examination of all grade-school children. Those children whose scalps show positive evidence of tinea capitis under the Wood light are then excluded from school and are not permitted to return until they are under a physician's care. They are required to wear a stocking cap while in school to prevent spread of the disease to others.

Additional means of controlling the epidemic of tinea capitis might rest with our city or county health departments through their promotion of educational campaigns in periodicals<sup>5</sup> and local newspapers to familiarize parents, teachers, and barbers with the disease and its modes of spread. Further, the health authorities could require barbers to use only handclippers (instead of electric clippers) on children under the age of fourteen. In this way, the hand clippers could be placed in boiling water for fifteen minutes, or in a 10 per cent solution of Lysol for one-half hour, so that any infected hairs clinging to the instruments would be sterilized. Behling and Markel<sup>1</sup> have recommended cleaning electric clippers either by running them one minute in hot oil (100° C.), or by holding them for a few seconds over an alcohol lamp or a singe stick. It is true that barbers refuse to cut a child's hair if they suspect that he has ringworm of the scalp. But some children undoubtedly get haircuts (with electric clippers) who have scalp ringworm in its early stages, i.e., before any bald patches are visible. Then the infected hairs, loaded with fungus spores, are caught in the clippers and come in contact with the hairline region of the next child who gets a haircut.

Should this method of controlling the spread of tinea capitis through barbershops seem impracticable to some public health authorities, the next best thing might be to advise immediate shampooing of a child's scalp following his visit to the barbershop. In addition, a fungicidal ointment, such as the undecylenate-undecylenic acid ointment, could be applied to the scalp at bedtime and the scalp reshampooed the next day.

## Summary

Ninety-eight cases of tinea capitis were diagnosed in private practice during a two-year period.

The most frequently affected age groups were three to eight years, inclusive.

Seventy-five boys were affected as compared to twenty-three girls, the ratio of boys to girls being approximately 3:1.

A practical office method of local therapy for epidemic tinea capitis is presented in detail.

Fifty-four out of fifty-five cases (98 per cent) of tinea capitis due to *Microsporon audouini* were cured by local therapy over an average treatment period of approximately five months.

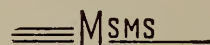
Success with this form of local therapy depends upon close attention on the part of both the parent and physician to several important factors. These are discussed step by step.

Suggestions for control of the tinea capitis epidemic are presented.

1515 Kales Building.

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## VAGOTOMY FOR PEPTIC ULCER

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# Detroit Physiological Society

Session of November 18, 1948

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## **Serum Levels Using Procaine Penicillin with Aluminum Monostearate; Oral and Intramuscular Administration**

Jean M. Robinson, Dorothy DeZelia, and Simon Kalish, Wayne County General Hospital and Infirmary, Eloise, Michigan

Procaine penicillin in peanut oil with 2 per cent w/v aluminum monostearate is one of the recent outgrowths of the current search for long-acting penicillin products. Using the B. subtilis serial dilution method of assaying serum penicillin levels, 1 c.c. (300,000 U) of this preparation given to patients intramuscularly was found to attain average levels above the required therapeutic concentration of .03 U/c.c. of serum in 97.5 per cent of cases at 1, 2, 4 and 8 hours. Ninety per cent of 75 cases maintained average levels above .03 U/c.c. for 72 hours, and 70 per cent for 96 hours.

Patients given 5 daily injections of 300,000 U intramuscularly with serum levels determined 24 hours after each injection showed a rise in concentration to 1-2 U/c.c., and maintenance of this level. Levels at 1, 2, 8 and 24 hours after five successive daily injections of 300,000 U of another lot were somewhat lower.

One tablet (100,000 U) of Crystalline Procaine Penicillin with 2 grains aluminum monostearate, buffered with 4 grains  $\text{CaCO}_3$ , gave serum penicillin levels at 1, 2, 4 and 8 hours which were above .03 U/c.c. but generally lower than levels found with the same dose of three other buffered oral preparations not containing aluminum monostearate. Crystalline Penicillin G, buffered with 4 grains  $\text{CaCO}_3$ , and unbuffered, was given in 500,000 and 1,000,000 U doses. Levels at 1, 2, 4 and 8 hours were higher for the unbuffered preparations than for the buffered, and neither consistently maintained levels above .03 U/c.c. longer than 8 hours.

## **The Effect of Liver Extract and other Supplements on Fatty Livers in the Rat**

Victor A. Drill and Charles A. Hall, Wayne University School of Medicine, Detroit.

Fatty livers and hepatic fibrosis were produced

in rats by feeding diets either high in fat or low in protein. Various supplements were administered to such animals to see if they would prevent the induced liver injury. The supplements tested included choline, methionine, desiccated hog stomach (Ventriculin), yeast, casein, and liver extract. Ten rats were included in each group and the diets were fed for a period of 60 to 200 days. Ventriculin was without effect in preventing the hepatic lesions induced by either diet. Yeast, methionine and casein exerted only a partial effect in preventing the induced hepatic changes and the best effect of the methionine and yeast was obtained with the low protein diet. On the other hand, liver extract and choline completely prevented the occurrence of any liver injury. The lipotropic effect of the liver extract does not seem to be due to its choline content as the liver extract supplied less choline than was present in the Ventriculin or yeast. Further, the effect of liver extract is not due to a stimulation of appetite with a subsequent increase in protein intake as daily measurements of food intake failed to show an increased food consumption. This lack of relationship to protein intake may also be seen by the poor preventive effects of the casein supplements alone. It is possible that liver extract contains an unknown lipotropic substance or a choline precursor that has not been previously identified.

## **Mechanism of Skull Fracture as Studied by the "Stresscoat"**

H. R. Lissner, E. S. Gurdjian, and J. E. Webster, Wayne University and Grace Hospital, Detroit, Michigan

Skull fractures due to accidental causes such as automobile crashes are of frequent occurrence. In the year 1947 in the City of Detroit 47 per cent of the injuries received in automobile accidents were head injuries, while on the rural highway head injuries occurred in 67 per cent of the cases.

In this study the location of the resulting linear skull fracture due to a blow in a given position was determined by obtaining the threshold deformation patterns in Stresscoat lacquer coatings on



the internal and external surfaces of the skull. By comparison of these patterns with x-ray studies of clinical fractures, and with fractures obtained experimentally on intact cadaver heads, it was found that linear fractures were initiated on the external surface of the skull due to outbending.

The surface of the skull was divided into twelve areas, and it was found that the general location and direction of threshold Stresscoat cracks was quite uniform in different skulls due to blows in

any one area. That fractures also occurred in these regions was verified for blows in four areas by tests of fifty-five intact cadaver heads. This indicated that the presence of scalp and skull contents did not materially affect the location or direction of the fracture.

The energy required to fracture the intact human cadaver head was found to vary from 400 to 900 inch pounds, the energy being absorbed in a time period of 1/1000 second.

### Session of December 16, 1948

#### Distribution and Excretion of Chloramphenicol (Chloromycetin\*).

Anthony J. Glazko (From the Research Laboratories, Parke, Davis and Co., Detroit).

A study of the distribution of Chloromycetin in the tissues of the rat and dog showed high concentrations in the liver and kidney, with progressively lower concentrations in the lung, spleen, heart, muscle and brain. Following therapeutic doses, the serum level increased rapidly, reaching a peak in about two hours and then falling gradually during the next eighteen to twenty-four hours.

Parallel analyses for total drug by a chemical method, and for active Chloromycetin by microbiological assay indicate that most of the drug is present in blood as unchanged Chloromycetin. On the other hand, about 90 per cent of the drug excreted in urine is found to be inactive, representing degradation products of Chloromycetin. From 80 to 92 per cent of the administered dose was accounted for by urinary excretion in man over a 24-hour period. Renal clearance figures for active Chloromycetin, uncorrected for protein binding, are about one-quarter the normal values for creatinine, whereas the Chloromycetin degradation products are cleared at a much greater rate than creatinine.

#### The Gastric Secretory Response to Intravenously Administered Amino-Acid Mixtures

Paul R. Sharick and Darrell A. Campbell, Eloise, Michigan.

It is known that individual amino acids when given intravenously produce a marked acid response which is due to a humoro-neural mechanism involving the vagus nerves. In addition, a

pronounced hypoglycemia has been found to occur.

Twelve patients were given rapid intravenous infusion of amino-acid mixtures, six receiving a commercial enzymatic protein hydrolysate, and six a commercial solution of the ten essential amino acids with added glycine. Eight of the patients had an active peptic ulcer and four were patients without gastric disease, selected at random.

In dogs, whose non-vagal pouches were proven by use of the insulin test, the humoro-neural mechanism of gastric stimulation due to intravenous amino acids was confirmed.

In all patients, a distinct rise in free and total gastric acidity occurred soon after administration of the amino-acid mixtures. The acid response was variable and approached that following satisfactory insulin hypoglycemia in only a few cases. In one case the response was abolished by subsequent vagotomy for peptic ulcer. A moderate to marked regurgitation of bile occurred in all cases due to duodenal hypermotility. No significant difference was found with either of the two amino-acid preparations used. No correlation was found between blood amino acid nitrogen levels and gastric acid stimulation. In seven instances, a moderate volume secretory response was obtained. An initial transitory increase in blood sugar occurred, followed by a return to fasting or slightly below fasting levels.

Amino-acid mixtures, orally and intravenously, are currently being used in the treatment of peptic ulcer. It is suggested that this plan of therapy may be contraindicated due to the gastric acid response. Caution may need to be exercised in the use of amino acids intravenously in patients with gastric and duodenal surgery postoperatively due to the

\*Trade name, Parke, Davis and Co.

(Continued on Page 235)

## Act in the Plan of Action

We, as physicians, have always been accused of keeping things to ourselves. We have kept aloof from the everyday happenings and concerns of our patients. We have told them very little about the great accomplishments of our swiftly moving science, all developed in the interest of our patients.

The greatest thrill that a physician has is the quick relief he is able to give a patient, or in the probable saving of a life by the use of one of our newer drugs. The whole objective and ideology of modern medical care is the reduction of the incidence and severity of disease, and in shortening the length of illness. This is distinctly to the advantage of the individual patient and to the general health welfare of our people.

But aside from the scientific accomplishments of our profession, we have shown a marked interest in the economic factor of modern medical care. The doctor's plan of prepayment surgical and hospital service has materially reduced the costs of severe illness. We have developed a marked interest in conserving our patient's pocketbook. The trend of modern medical care can be briefly summarized:—better diagnosis, more effective drugs, less and shorter illness, at less cost. We as a profession know we are living up to this objective, but, emphatically, our people do not know it. So, we must prove we are not self-seeking. We must sell ourselves and our ideals to the people.

Had we done this ten years ago, we would not now be facing the threat of bureaucratic political control of our profession and of the type of medical care we will be able to give our patients. By distorted statistics, etherial theoretical statements, and energetic activity, social reformers are attempting to influence the thinking of our lawmakers and the people of our country.

At the AMA Interim Session, the House of Delegates and the Board of Trustees assumed leadership and the full responsibility necessary to bring complete realization to the people that political control of medicine is not in the best interests of the public. The American Medical Association is now truly the voice of American Medicine.

We, individually, are the American Medical Association. It is our duty to fully co-operate with our officers and to exert all our energies to assist in the plan of action. We must do this if we wish to retain our individuality and if we are sincerely interested in the welfare of our patients.

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



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# Editorial

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## FALSE ECONOMY

**B**EFORE THE war a certain package of food, a typical unit, cost \$1.00. During the war the government established controls, rationing, and at the close of the war that same unit of food cost \$1.43. Controls were released and now that same unit of food costs \$2.19. In 1928 the federal government took from employers, employees, and workers four billions of dollars in customs and other taxes. Now it takes forty-two billion from the only people who can pay, those who are productive—that is from private enterprise.

Two groups of people make up the nation, those who represent business or private enterprise and those who represent government. Business includes labor, capital, management, and produces all we eat, drink, wear, use for shelter or convenience—everything we use. Government produces nothing but advice, protection, regulation. Business is creative, must pay its own way, and some besides for the use of government. Government, on the other hand, is a parasite on business, a necessary one to be sure in so far as it gives us the services we demand of it. Government does not create wealth or materials.

There are approximately 148 million people in the United States according to the last estimate. Twenty million of them are over sixty and theoretically non-productive, fifty-four million are under twenty-one, and also theoretically non-productive. That uses up one-half of all our people. Government servants with their dependents, the military, and the unemployables, make a large slice of the remainder, so that the rest must carry the burden of the whole national economy. Every worker taken out of creative employment, out of private enterprise, increases by just so much the tax burden we all must pay to keep the nation and ourselves going, remembering that government employees are non-productive, and non-creative. They consume wealth instead of producing it.

Now we are faced with the most intensive drive of government to cut off a very considerable piece of our creative private enterprise, the health services, and make a government bureau with its enormous increase of personnel, estimated at least a half million persons, who will become consumers

instead of producers. This addition to those now engaged in the health services will be lay persons whose only contribution to the national health care will be regulation and advice (we question the protection in this instance). This is just the beginning of the socialistic state; other inroads on private enterprise will follow, and since government does not create wealth or materials, the tax burdens of that segment of our people who do produce will increase still more to the inevitable breaking point.

No matter what the wealth and resources, natural or human, this nation or any other cannot continue this trend. We now have the Marshall Plan in operation in Europe, because Europe for the past fifty years has been doing the very things we are now being high-pressured into by our power-crazy governmental bureaucrats. When will we wake up? We are headed straight for destruction and the same chaos now so prevalent in Europe. When we go down the same road who will come to our rescue? Probably the Hottentots, for there is no race or nation now in promising prospect.

## POLITICS AND MEDICINE

**C**CAREFUL READING of Federal Security Administrator Oscar R. Ewing's report shows how utterly inconsistent are his arguments. In the first two sections of the book he tells how completely inadequate is the present medical care of the American people. He admits their health is the best in the world, but claims that we know things about medicine, infectious diseases, cancer and hospital care that would eliminate a tremendous amount of sickness; would save an estimated \$27 billion a year in loss of income, and 325,000 deaths which could be prevented. He says the average income of 50 per cent of the American people is under \$3,000 a year, but in figuring the loss to the nation of labor-years due to sickness, he uses the earning capacity of \$3,800 per year. He says the expense of caring for sickness is an extra and unbearable load for these people, but the whole country could carry it if distributed among the whole people in proportion to their ability to pay. Yet he proposes to assess the tax

or the premium on only the first \$4,800 of income. That does not distribute the burden equally, or according to the ability to pay, but *establishes an income tax for the lower income group*. He criticizes the voluntary plans for not covering the indigent and those of extremely low income who cannot afford to pay a premium of \$48.00 a year for a family. But in his proposal he leaves this same group uncovered unless local relief or welfare organizations, governmental or voluntary, will pay the premiums which they could do more easily with our present voluntary non-profit plan.

He pictures a health condition with unlimited care, hospital, medical, dental and others, for whomever wishes to seek that care. But he says the medical profession at present is woefully undermanned to take care of the present load. He plans a three-year adjustment period after this new law is enacted and before it comes into effect, during which time hospital facilities, medical dental, nursing and other personnel, will be provided. He admits the medical schools cannot carry a much bigger load than they do carry. He admits the establishment of new schools would be a difficult and slow process because of building problems and inadequate teaching personnel, yet he proposes to do this job. He claims we are short 900,000 hospital beds and that we now have about 900,000 effective hospital beds. He proposes new hospitals, new "health clinics" in every community as low as 500 persons.

Mr. Ewing quotes the old statement that 40 per cent of the counties have no hospitals, and says that, ideally, nobody should be more than one hour away from a good hospital. There was a survey some years ago with a published map and a 30-mile circle drawn around every general hospital in the United States. There were a few spots other than in remote mountain districts which were not included in some of these circles. We believe a *careful* study would show that the number of people in the United States more than one hour away from a hospital is negligible. Mr. Ewing paints a glowing picture of the ideal which we should have, based upon all the knowledge we do have, and blames our present system of health care, including the voluntary plans, for not attaining that 100 per cent ideal. He admits that under his plan this ideal could not be reached for approximately forty years because it will take that long to reach the goal which he has set up,

unless he can work wonders in creating hospital facilities, medical training facilities, and personnel. The same applies to dental and nursing fields. Mr. Ewing is a shrewd advocate of an ideal state, gives only begrudging credit for what has been done and at the same time points out the inadequacies. He claims his proposed plan will meet all these objections, but in the same paragraph admits that there must be some curtailment.

Mr. Ewing is a determined propagandist who will balk at nothing to gain his ambition. He thinks nothing of using distorted facts and statements so long as they may secure for him a post in the President's cabinet and the unhampered control of the lives and health of 148 million people. He is greedy for power. He is a convincing pleader if the judge is denied the true facts or is given distorted premises.

## THE AMERICAN MEDICAL ASSOCIATION AND THE BLUE SHIELD

THERE HAS BEEN much publicity to the effect that the American Medical Association's House of Delegates disapproved of the Blue Shield plans at St. Louis. This is an attempt to discredit the voluntary plans, to show division in the medical profession and by showing dis-union to further the urge for national compulsory health insurance which is in effect socialized medicine.

Here are the facts: The American Medical Association at St. Louis did approve the program to furnish national sales facilities for Blue Shield on a co-operative basis. They recognized the necessity for this avenue of sales but they rejected the plan of the Blue Cross and Blue Shield commissions to establish a special limited insurance company to handle this program. There was no disapproval of the Blue Shield theory of supplying health care by the voluntary prepayment plan, only disagreement as to the method of making sales in the case of companies with national coverage which desired to contract with one organization instead of one (or more) for each state.

Michigan had favored the establishment of an insurance plan, the details to be worked out and to be approved by our Michigan Medical Service before becoming effective. Other states had joined in this program. The American Medical Association has now assumed the responsibility of directing the national sales. They have also been instructed to establish and help new Blue Shield



plans where they are not now available. Unfortunately, publicity on this action at the time of the St. Louis meeting was bad and much misinformation was given the public.

### AMERICAN MEDICAL ASSOCIATION DUES

**A**T ST. LOUIS at the Interim Session, the House of Delegates of the American Medical Association, for the first time in its history, assessed dues against the complete membership. This was in response to a universal demand that the American Medical Association assume its responsibility in public education on matters of medical economics as well as matters of scientific progress, not forgetting the political implications of both. Again, the newspaper publicity on this assessment was very bad. The general public was given the idea that a "slush fund" was being created and unfortunately many of our doctors got the same idea. For years our progressive doctors throughout the country have been urging that the American Medical Association, and not independent committees and unofficial organizations, assume the leadership in medical-public relations and the fight against socialized medicine.

We have regretfully heard some complaints about the assessment among our doctors, and Mr. Oscar R. Ewing of the Federal Security Administration said positively 40 per cent of our doctors would not pay this assessment. It is our belief that if the American Medical Association had taken this step ten years ago and had conducted as active a campaign in public education as the Michigan State Medical Society has, and if the American Medical Association had sparked the development of our non-profit medical service plans from the beginning, we would not have the threat to our unregimented practice that we now have. Our membership, to a man, should pay this assessment and be glad to do it. It is little enough for each one to contribute to protect his future independent practice. We were told recently that the members of a certain union, which is now conducting a strike in one of our metropolitan areas, are being assessed \$35.00 per month in addition to the \$75.00 per year and a few dollars a month of local dues that they normally pay. Nothing even approaching that assessment is being asked of the medical profession. If we do not meet this rather modest request, we can certainly blame ourselves for what will happen to us if Mr. Ewing and his cohorts have their way.

### EXECUTIVE SESSIONS

**W**HY THE TWO pieces of "bad" publicity just mentioned? Again we protest the conduct of executive sessions by the American Medical Association's House of Delegates. Press representation throughout the nation had been invited to this Interim Session. They were excluded from the meeting which took action on the special assessment. The meeting about Blue Shield followed immediately and someone just remembered after the session was called to "rise from Executive Session." The Press representatives should have been very carefully informed of these two actions. They evidently resorted to by-ways for information, and naturally the profession got a "poor press" to put it mildly. Many think the adverse reporting cannot be easily corrected. Executive sessions have a purpose, but should always be handled to our advantage instead of disadvantage.

### THE SHORTAGE OF PHYSICIANS

**I**T SEEMS TO be popular now to decry the shortage of physicians. Mr. Oscar R. Ewing has told us that we have a shortage and that the Government must produce 22,000 more than the present production rate within the next ten years, in order to supply the needs of the country. We are being told that the schools are not producing enough and must double their output of physicians soon. What are the facts?

Wayne University in Detroit can admit 68 freshmen students each year with their facilities for instruction and administration. During the war, under pressure from the government, they admitted 80, but found the increased number unsatisfactory when it came to rendering the best instruction especially in the laboratory, and opportunities for practice training. Wayne cannot take students with residence outside of Michigan. Their applicants must undergo a very rigid inspection and examination in order to select 68 out of a list of approximately 2,000 applicants.

The University of Michigan can take 120 freshmen students. Their applications must be received before the first of March. For the 1948 year, there were 1,825 applications. On December 15, 1948, there were already 3,000 applications for the class entering in September, 1949. Michigan residents are given the preference and in the present school year only nineteen from out of state were enrolled. Incidentally, fifty-seven Michigan residents are

registered in out of state medical schools. These figures all refer to freshmen students. In order to enroll more students, 500 more beds would be required in Ann Arbor, together with an increased number of instructors, and that would accommodate only fifty more students.

In the United States, there are 196,000 doctors of medicine which gives a ratio of one to every 790 persons. Six new medical schools are being organized now and six more are changing from basic science schools to four-year medical schools. When these are operating to capacity, it is estimated that by 1980 there will be one doctor to 793 persons in the United States. How about this so-called shortage? Michigan has one doctor to 750 persons, New York State, one to 511; England, one to 1,490; Germany, one to 1,600; The Netherlands, one to 1,800; Norway, one to 1,700; and we are being notified that there are now available for entry into the United States, if we can take them, over 3,000 well-trained, displaced physicians from these very European countries whose ratio is one to 1,500 or more.

Naturally parents of these 3,000 or more potential students who wish to study medicine in Michigan and find it impossible to enter medical schools, are impressed with the erroneous statements concerning the shortage of physicians. Mr. Ewing and his socialized program have stressed this shortage as one reason for taking over the whole medical profession, its education, distribution and use. We will admit some areas do not have enough doctors, but some areas have too many. Therefore the apparent shortage is only poor distribution. The medical profession has been trying for some years to induce doctors to go into rural areas and loan funds have been established to help students with that ambition. Our Michigan Foundation for Medical and Health Education established a fund for that purpose two years ago and to date has had no applications! There have been six inquiries for information. Incidentally, the University of Michigan has an unrestricted loan fund of \$60,000 for students in the medical department which could be used for training students in rural areas; the whole University has approximately \$300,000 in loan funds and *no takers*. Students today want scholarships, not loan funds. Rural doctors must have adequate workshops.

We believe the problem in this matter of shortage of doctors is not in educating more doctors. We think too many of our doctors are difficult to

find during certain hours and too many have adopted rigid appointment schedules of practice. That is the worst complaint that we are hearing from the public and if that could be corrected, we would hear no more complaint of lack of doctors.

### FOOD ALLERGIES?

**B**READ, or some other form of wheat flour, is eaten daily by 95 per cent of our people. Starch is the main constituent, although small amounts of protein and fat are present due to adding dry milk solids to the baker's mix. It is also enriched with the essential vitamins by adding iron, thiamin, nicotinic acid and riboflavin.

In 1946, Mellanby in England discovered that dogs which were fed flour bleached with nitrogen trichloride developed "canine hysteria" or fits. Later, experiments on human beings failed to show any serious symptoms or pathological changes in the brain which could be attributed to eating "agenized" flour. This, however, does not rule out the possibility of mild irritation to the human nervous system.

At a recent meeting in Washington, the Food and Drug Administration decided to change the standards for the manufacture of flour. Nitrogen trichloride will be replaced by chlorine dioxide—a harmless bleaching agent.

In September, at our annual meeting, Dr. T. G. Randolph, of Northwestern University, read a paper on food allergy. The clinical symptoms of wheat allergy are subclinical edema, itching of skin, internal tension, profuse mucus production and drowsiness. He finds that about half the patients who enter a doctor's office suffer from internal tension. By the use of a wheat elimination diet, the above symptoms disappeared.

Could it be that this internal tension is due to the use of "agenized" flour instead of being an allergic reaction to wheat?

The following taken from *The Journal of the American Medical Association* may serve to clarify the question:

#### "Agenized" Flour

*To the Editor:—I recently read an article on the use of nitrogen trichloride ("agene" gas) in the milling and bleaching of white flour. The inference was that consumption of bread made from this flour is injurious to human beings. Any information in regard to this subject would be appreciated.*

*M.D., Canada*

ANSWER.—"Agenized" flour is a product which is produced by exposing the flour to nitrogen trichloride



gas ("agene"). "Agene" was widely used in the United States for improving the baking quality of flour until recently.

In 1946, Mellanby in England reported the production of "canine hysteria" (running fits) by feeding dogs flour treated with nitrogen trichloride ("agene") and proved that the toxic element was developed in the process by the action of the nitrogen trichloride on the wheat protein. American investigators have confirmed his findings.

In all these studies the level of "agenized" flour necessary to produce a reaction in dogs is substantially higher than the level of flour which would be used in an ordinary human diet.

Dr. Elvehjem reported that experiments on 12 human beings have revealed no symptoms or encephalographic changes after eating "agenized" flour or "agenized" gluten in amounts which would unfailingly produce hysteria in dogs (J.A.M.A. 135:760-763, 1947).

The Food and Nutrition Board of the National Research Council stated that it feels that the use of "agene" in treating flour should be abandoned in the shortest time which is economically feasible. A more complete discussion can be found in the Nov. 22, 1947, issue of THE JOURNAL.

Following a conference held recently in Washington, the Food and Drug Administration is working on, and probably will issue within a few weeks, revised standards for manufacture of flour the principal change in which will be substitution of chlorine dioxide for nitrogen trichloride (agene) as a bleaching agent. Evidence was presented at the conference, attended by representatives of federal law enforcement agencies, the milling and drug industries and scientists familiar with the toxicity of agene, that the proposed substitute is both safe and practical. Among those who were heard at the conference sponsored by the Food and Drug Administration was Sir Edward Mellanby, who in 1946 demonstrated the injurious effect on dogs of white flour bleached with nitrogen trichloride (See THE JOURNAL of Nov. 22, 1947).

FRED H. DRUMMOND, M.D.

## PRESIDENT'S ADDRESS

The President in his State of the Union address, delivered January 5, 1949, had this to say about health:

"The Government has still other opportunities—to help raise the standard of living of our citizens. These opportunities lie in the fields of social security, health, education, housing and civil rights.

"The present coverage of the social security laws is altogether inadequate, and benefit payments are too low. One-third of our workers are not covered. Those who receive old-age and survivors insurance benefits receive an average payment of only \$25 a month. Many others who cannot work because they are physically disabled are left to the mercy of charity. We should expand this social security program, both as to size of benefits and extent of coverage, against the economic hazards due to unemployment, old-age, sickness, and disability.

"We must spare no effort to raise the general level of health in this country. In a nation as rich as ours, it is a shocking fact that *tens of millions lack adequate medical care*. We are short of doctors, hospitals and nurses. We must remedy these shortages. Moreover, we need—and must have without further delay—a system of pre-paid medical insurance which will enable every American to afford good medical care."

## CORRECTION

The first paragraphs on page 39 of Dr. N. M. Bittrich's paper "Pre-Anesthetic Medication," published in the January, 1949, issue of THE JOURNAL, should read:

— — — — — Emotional excitement is enhanced by a hyperthyroid condition.

With proper premedication the basal metabolic rate can be lowered to a satisfactory starting point. We have at our disposal a number of well-tried and satisfactory agents to lower the rate, reduce emotional excitement, and to relieve pain.

The evening before operation the patient should receive some form of barbiturate to relieve emotional excitement. Barbiturates do not lower the

basal metabolic rate except in overdoses. They are especially valuable in relieving emotional excitement. They do not relieve pain. This is well known to all who have attempted to control the pain of the obstetric patient with heavy doses of barbiturates during the first stage of labor. The patient sleeps quietly until a pain occurs, at which time she tosses wildly about the bed and must be restrained.

This was correct in the original proofs, but in page make-up three lines were reset and not properly replaced. The error is not in the author's final proof, and was missed because in the page proofs a check is made only of corrections that have been made. A mechanical slip of this nature is almost unheard of, and escaped detection. We are sorry.—EDITOR.

# We Serve with Easter Seals

By Percy C. Angove

DOCTOR, what does Easter mean to you? Sunrise services—a period of praise and prayer—new spring clothes—baskets of gaily colored eggs for the children? Of course, but it means much more to untold numbers of crippled children because for them, Easter time is *Easter Seal* time—symbolically synonymous of Hope and Resurrection, for they must be helped to help themselves.

Sponsored by an organization well known to and appreciated by the doctors of Michigan, namely, the Michigan Society for Crippled Children and Adults, Inc., the 16th Annual Sale of Easter Seals will open on March 17 and end Easter Sunday, April 17.

The mutual interests of the Michigan State Medical Society and the Michigan Society for Crippled Children and Adults, Inc., are deep rooted, born of long co-operative association and with vital service to the physically handicapped. Through the years our two organizations have worked side by side. Their very existence represents a bulwark of hope and strength for the crippled and afflicted of Michigan. A demonstration of results obtained in the accomplishments of specific ends are most evident. Only to mention one instance, the Rhematic Fever program.

Our organizations, as you know doctor, have been an endless source of help to one another, sharing experiences and knowledge, overcoming obstacles together, maintaining high standards and ethical procedures in medical practice, and always participating in rendering the best possible service. Separately and together, we have acquired tremendous knowledge and understanding of the sick and their needs. As we grow—as we learn—we realize more and more the extent of that need.

We have not reached the limit of our helpfulness. We are not content. Much has been accomplished but much more remains to be done. We must project our plans toward development, and expansion—creating for the physically handicapped a new world of usefulness and self-sufficiency. It costs money. Easter Seals again must come to the rescue.

What do *Easter Seals* make possible? Let us review some of the activities of the Easter Seal so-

ciety—the Michigan Society for Crippled Children and Adults, Inc. Space will not permit of a consideration of our mutual promotional legislative and educational activities, rather, we must



Larry wants to stand and walk alone. His braces and especially the special walking apparatus are expensive, but necessary—the doctor said so. By buying and using Easter Seals, you can help many like Larry to run and play like other boys his age.

for the moment give a very brief report of stewardship, of direct services that were made possible by *Easter Seals* last year.

*Easter Seals and Rheumatic Fever.*—Less than three years ago the Michigan State Medical Society sought the help of the Michigan Society for Crippled Children and Adults, Inc. A plan of operating diagnostic centers by the doctors of Michigan was devised. There are now 30 such centers. The doctors afford the technical service and the Michigan Society, the Easter Seal agency, provides the finances, last year to the extent of \$21,000 which together with prior contributions totaled \$47,000. Has it been worth while? Here is the answer. According to the latest available data, approximately a total of 4,500 patients were referred to the centers by doctors of medicine and expertly examined. Of this number, over 1,000 were defi-



nately diagnosed as having rheumatic fever. Of the remaining, over 1,000 are in need of further screening, but are being medically treated as a safeguard. No wonder the plan is being written

tant, one of the most popular programs of the society is its occupational therapy and crafts service for the homebound, the very severely handicapped who in the past were known as the "forgotten



With world series enthusiasm, these crippled children watch while Pete whams a ball to center field. Crutches, braces, special equipment and recreational facilities, and many more essential services were made available because Easter Seals came to the rescue. Share your Easter joy. Buy Easter Seals!

up and discussed throughout the United States. No wonder other states are emulating Michigan's program. The Easter Seal society is merely helping the doctor do the job.

*Easter Seals and Cerebral Palsy.*—The year 1948 was particularly a very active year in behalf of cerebral palsied children. A total of nine special clinics were conducted by the society's medical consultant, at which 239 children were examined and as the result are under treatment by the doctors of Michigan. Many doctors avail themselves of the opportunity to attend and observe these clinics. A clinic is never held unless with the approval of the local Medical Society and referrals must finally, come from the doctors of medicine. The conduct of these clinics by the Easter Seal society cost over \$6,000. Is it worth while? You answer.

*Easter Seals and Occupational Therapy for the Homebound.*—Even though not the most impor-

cripple." The Easter Seal society employs six full-time qualified registered occupational therapists. Twenty different sources referred 738 homebound clients, and over 400 were actually provided occupational therapy and craft work experiences. The society maintains one permanent sale outlet for the disposal of finished products which compare favorably with commercial products of similar kind and are priced accordingly. At different times periodic sales were conducted throughout the state. When the useful products are sold, all profits are returned to the clients. In most instances it's the first money they have ever earned, but, over and above all else they are helped physically, mentally, manually and socially. The spark of ambition is revived and the homecrafters feel less dependent, in fact, this program more often than not affects the entire family environment relationship for good. We consider this the best kind of therapy and I'm sure doctor, you will agree that it helps the practice of medicine. This pro-



gram alone cost the Easter Seal society over \$15,000 in 1948.

*Easter Seals and Epilepsy.*—An epileptic clinic, to date solely financed jointly by the Easter Seal Society and its Detroit chapter to the extent of \$20,000, is located in Detroit. The clinic plans and procedure are approved by the Wayne County Medical Society, a committee of which act as advisors. With respect to the practice of medicine, the policies are the same as obtained for the Rheumatic Fever program. Doctor-patient relationships are strictly maintained. During a short period of time and with problems of initial organization, there have been over 100 referrals, of which sixty-five were accepted for active clinic attention and twelve patients have been closed by completion of services. The organization and function of the clinic have received such favorable consideration, that the Michigan Department of Mental Health agreed to augment the staff as of July 1, 1948, by furnishing a medical director, a psychiatric social worker and a clinical psychologist. It is managed by a board of directors, among whose members are doctors of medicine. A panel of doctors recommends and evaluates medical treatment as a phase of diagnostic and prognostic procedures leading to physical rehabilitation.

*Easter Seals and Camping.*—Because of the many advantages derived from the standpoint of health, education and social adjustment from summer camping and day camping experiences, these activities were stressed for the more severely handicapped such as the cerebral palsied and rheumatic fever patients, who because of the nature of the handicap and the need for special care, in the past have been deprived of well-regulated, wholesome, healthful, activities. This past summer, the Easter Seal society expended over \$5,000 in this type of service accommodating over 200 children.

*Easter Seals and Scholarships.*—Because of the drastic shortage of such technicians as physical therapists, occupational therapists and special teachers, the Easter Seal society maintains a scholarship policy, the purpose of which is to recruit professionally trained personnel. During the past year thirty-two students have been the recipients at a total cost of over \$4,000. Easter Seal money. The value of this particular service can never be

mentioned in terms of dollars and cents, but we do know that untold numbers of severely handicapped children, over a long period of years, will be the beneficiaries.



Even crippled boys can produce, if given the opportunity. Young farmer Charlie wears braces and crutches, but he helps with gardening at a summer camp for handicapped youngsters. Helping crippled children toward independence is made possible through your purchase of Easter Seals.

*Easter Seals and The Road Ahead.*—The foregoing only relates a very few of some of the society's major activities. There are many more services made possible by the Easter Seal—such as, transportation to and from clinics, hospitals and schools, wheel chairs, braces, and prosthesis, special equipment, home tutoring, et cetera, et cetera.

What about the future goals born of necessity? The needs of the physically handicapped are many and varied, and they present an ever-increasing challenge. What are some of these goals?

1. Better and increased facilities for the severely handicapped wherever he lives.
2. More and better care for rheumatic fever sufferers



by enlarging the present program and encouraging the support of others.

3. Nursery schools for the very young handicapped children where proper medical care and training can go hand in hand.

4. The training and employment of more speech and hearing therapists.

5. More occupational therapy and craftwork for the more homebound patients with both functional therapy and/or prevocational and vocational values.

6. Recruiting more adequately trained technicians in the proper care and treatment of the more severely handicapped; the lack of technicians has created a serious bottleneck in work in their behalf.

7. To encourage the employment of physically handicapped without discrimination.

So much is involved that all of these goals cannot be immediately met, but, with these goals before us we accept the challenge with Easter Seals.

Doctor, we thank you for your help and cooperation in the past. Any achievement is due to all concerned working jointly. We, of the Michigan Society for Crippled Children and Adults, Inc., pledge ourselves to more and better service, realizing that the constant growth in service, reflects the Easter Seal society's fundamental need, and that the increase in public confidence in the society's ever-expanding program reflect real human values.

#### Buy and Use Easter Seals

You can help the cause greatly and cause others to purchase Easter Seals, if you use them on your office correspondence, statements, and other communications. If, by any chance, you may not be afforded the opportunity locally to purchase Easter Seals, they are available by writing to

The Michigan Society for Crippled Children  
and Adults, Inc.  
449 West Ferry Avenue  
Detroit 2, Michigan.

Any help, no matter how small, will be greatly appreciated.

#### FOURTEEN COMETS FOUND IN 1948

"The year 1948 was another record-breaking one for comet seekers," Dr. Fred L. Whipple of Harvard Observatory revealed at the meeting of the American Astronomical Society in New Haven, Conn.

Fourteen comets were spotted during the year. This is as large a number as has ever been found, and only the third time on record when over an even dozen have been spotted in a single year.

## Communication

Mr. Oliver Ebel, Secretary  
Kansas State Medical Society  
Topeka, Kansas

My dear Mr. Ebel:

I have just run across something that I think is of immense interest and importance in furthering the plan promoted by Dr. Murphy and others for improving the medical facilities in Kansas.

I refer to a booklet entitled "Planning Your Career" published by the Michigan State Medical Society, 2020 Olds Tower, Lansing, Michigan. I think copies of this booklet should be placed in every high school in Kansas. In this way we would recruit people to be interested in careers associated with medical practice. As you will see, this includes dietitians, nurses, hospital administrators, pharmacists, and many others.

I would like to see our Medical Society buy 50,000 copies of this from the Michigan State Medical Society, or get permission to reprint it under our own imprimatur. Will you take it up before the Executive Committee and let me know what they do?

Sincerely yours,

December 15, 1948

KARL A. MENNINGER, M.D.

#### UNIVERSITY POSTGRADUATE COURSES—1949

Brief Review Courses for Graduates in Medicine

Anatomy (Thursdays)—February 10-May 26

Internal Medicine:

Diseases of the Gastro-Intestinal Tract—March 14-18

Metabolism and Endocrinology—March 21-25

Rheumatology—March 28-30

Recent Advances in Therapeutics—March 31-April 1

Diseases of the Heart—April 4-8

Diseases of the Blood—April 11-15

Allergy—April 18-22

Electrocardiographic Diagnosis—August 29-September 3

Ophthalmology Conference—March 7-9

Otolaryngology Conference—March 10-12

Pediatrics—April 13-15

Roentgenology, Diagnostic—April 18-22

Summer Session Courses—June 20-August 13.

For further information write to

HOWARD H. CUMMINGS, M.D.

Department of Postgraduate Medicine, Room 2040

University Hospital, Ann Arbor, Michigan

## Know Your MSMS Officers

*They are Leaders in Professional and Civic Activities on the  
Local, State, and National Levels*

**President Edward Frank Sladek, M.D.**

*Traverse City*



Dr. Sladek completed his pre-medical work at the Lewiston Institute in Chicago and the University of Illinois. He then received his M.D. degree from the University of Illinois, and served his internship at Michael Reese Hospital in Chicago. His postgraduate training includes special clinical

work in proctology in Detroit, Rochester, Minnesota, and Chicago.

An officer in the Medical Reserve Corps in World War I, Dr. Sladek is a member of the American Legion. He is also chairman of the Public Welfare Committee of the Traverse City Chamber of Commerce, a member of the Board of Directors of Michigan Medical Service, and of the Elks, Knights Templar, and the American Legion.

Dr. Sladek numbers among his professional memberships those as affiliate member of the American Proctological Society, and Fellow of the International College of Surgeons; he serves as president of the Associated States Postgraduate Committee, as well as of the National Conference on Medical Service.

He is now on the staff of the J. D. Munson Hospital, consulting proctologist of the Central Michigan Children's Clinic, and consulting proctologist of the Traverse City State Hospital.

Dr. Sladek has written several papers, including "The Physical Rehabilitation Program of the U. S. Government," "The Activities of a State Medical Society," and "Co-Operative Activities Between Physicians and Druggists."

He served as Councilor of District 9 for ten years and as chairman of The Council for three years, prior to his election to the presidency of the Michigan State Medical Society.

**President-elect William E. Barstow, M.D.**

*St. Louis*



Dr. Barstow was graduated from the University of Michigan Medical School in 1905 and is the oldest practicing physician in St. Louis, having been there for forty-three years.

Active in community affairs, Dr. Barstow is past president of the Rotary Club, executive councilor of the Saginaw Area Boy Scout Council, a Silver Beaver in the same organization, a life member of the Masonic Lodge, director of the Gratiot Country Club and a member of the St. Louis Sportsman's Club. He has served six years as president of the school board and was medical representative for the local draft board during the past war.

Professionally, Dr. Barstow has served two terms as president of the Gratiot-Isabella-Clare County Medical Society as well as two terms as secretary of the same group. He has been Councilor for the MSMS for the past twelve years and has attended every annual session since 1910.

He is now chief-of-staff at the R. B. Smith Hospital, Alma, and is affiliated with Community Hospital, Mount Pleasant, and Mercy Hospital, Bay City.

**Council Chairman Otto O. Beck, M.D.**

*Birmingham*



Dr. Beck received his pre-medical training at Central Wesleyan College, Warrenton, Missouri, and the University of Missouri, and his M.D. degree from Northwestern University. Both his internship and one year residency were served at Harper Hospital, Detroit.

Following service in the first World War, Dr. Beck was appointed medical director for the Oren-



burg (Russia) District of the American Relief Administration.

Dr. Beck has served as president of the Exchange Club and worked on various committees of the Birmingham Chamber of Commerce.

At present, Dr. Beck is serving as a member of the Birmingham Exchange, and is on the staff of the St. Joseph Mercy Hospital in Pontiac. He is also Councilor for District 15 and a trustee of Michigan Hospital Service.

**Vice-chairman Reader J. Hubbell, M.D.**

*Kalamazoo*



Dr. Hubbell took his pre-medical and M.D. degrees at Northwestern University, serving his internship at Wesley Memorial Hospital in Chicago. He later studied urology under B. A. Thomas, M.D., of Philadelphia. Dr. Hubbell is a Fellow of the American Urological Association and a Dip-

lomate of the American Board of Urology.

The Vice-Chairman of The MSMS Council is a Rotarian and a past member of the Boy Scout Council. He was also instrumental in the formation of the first Michigan Rural Health Conference several years back.

At the present time Dr. Hubbell is a staff member of Borgess and Bronson Hospitals in Kalamazoo, consultant at the Kalamazoo State Hospital, Fairmont Hospital, and the Del Vista Sanitarium, Plainwell, Michigan.

His latest scientific paper on "Prostatic Surgery" has been submitted for publication in THE JOURNAL of the Michigan State Medical Society.

Dr. Hubbell is Councilor for District 4.

**Secretary L. Fernald Foster, M.D.**

*Bay City*



Dr. Foster attended Lafayette College where he graduated with a Ph.B. degree. He received his M.D. at the University of Pennsylvania, with his internship and residency at Presbyterian Hospital, Philadelphia. He has done postgraduate work at the University of Pennsylvania, Johns Hopkins, and Washington University.

A medical reserve officer in World War I, Dr. Foster has been extremely active in civic and fraternal organizations. He is a past president of the Bay City Rotary Club, a member of Elks Lodge, the Masonic Orders, and the American Legion. In addition, he is a member of the Kappa Sigma and Alpha Kappa Kappa Fraternities.

Dr. Foster has always been active in his professional affiliations, serving as secretary of the Bay County Medical Society for twenty-five years, and the Michigan State Medical Society for thirteen years. He is also a Diplomate of the American Board of Pediatrics and of the National Board of Medical Examiners, as well as a member of the American Academy of Pediatrics. He served as president of the National Conference on Medical Service ten years ago, and is now one of the five directors of the Co-operative Medical Advertising Bureau of the AMA which handles the business side of thirty-four state medical journals.

In addition to private practice, his duties include those of chief of the Department of Pediatrics, Mercy Hospital, visiting pediatrician, Bay City General Hospital, and consulting pediatrician at the Midland and Mt. Pleasant Hospitals.

**Treasurer Andrew S. Brunk, M.D.**

*Detroit*



Dr. Brunk was graduated from Lima High School in Ohio in 1904, finishing his pre-medical study at Baldwin University in 1905. He then gained his M.D. at Ohio State College in 1909. His internship was spent in Cleveland, Ohio, at the Huron Road Hospital. Dr. Brunk has done postgraduate work at New York Postgraduate Hospital and Barnes Hospital, St. Louis, Missouri.

He started his practice in La Junta, Colorado, leaving there in 1924 to establish himself in Detroit. During the first World War he served as chairman of the Otero (Colorado) County Draft Board.

Civilian activities include membership in the Economic Club of Detroit, the Detroit Athletic Club and the Beach Grove Golf Club of Canada.

Dr. Brunk is president of the Michigan Health Council. He has served on the Executive Committee of Michigan Medical Service since 1939

and is a member of its Board of Directors. During the same period he acted on the Executive Committee of Michigan Hospital Service and is also a trustee of that organization.

Past offices held by Dr. Brunk include the presidency of the Wayne County Medical Society, Michigan State Medical Society and the Conference of Presidents of State Medical Societies, an organization which he created.

Dr. Brunk founded the Martin Place Hospital and today is secretary-treasurer of that institution. He is also on the staff at Jennings Hospital.

Speaker John S. DeTar, M.D.  
Milan



Dr. DeTar completed his premedical training at Wayne University and the University of Michigan. He received his M.D. spending two years at the University of Michigan, followed by two years at Wayne University. He served his internship at Henry Ford Hospital, and attended postgraduate courses at the University of Michigan.

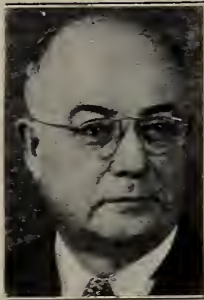
In his capacity as one of Milan's leading citizens, Dr. DeTar officiates as president of the Library Board, president of the Community Council, chairman of the Citizen's Committee of Washtenaw County, and member of the Recreation Council.

Dr. DeTar further acts as a leader in the Milan Boys' Club and is team physician and chief supporter for Milan High School Athletic teams. He is also on the Milan Veterans Council and an active member of Rotary Club.

In addition to his civic responsibilities, Dr. DeTar is a past president of the Washtenaw County Medical Society and has officiated as Speaker of the House of Delegates of the Michigan State Medical Society since 1947.

Dr. DeTar was chosen as "Michigan's Foremost Family Physician of 1948" by The Council of the Michigan State Medical Society, last January.

Editor Wilfrid Haughey, M.D.  
Battle Creek



Dr. Haughey received his premedical training at the University of Michigan and the University of Detroit, and his M.D. degree from the Wayne University College of Medicine. He interned at Harper Hospital, Detroit, and did postgraduate work in Chicago, Philadelphia, Harvard College, Rochester, N. Y., and Rochester, Minnesota.

He was a Major in the Medical Reserve Corps in World War I, and served as a Lt. Colonel in the reserves until his retirement. Among his many civic activities Dr. Haughey is past president and life member of the Board of Directors of the Battle Creek Community Fund, member of Kiwanis, former president of Exchange Club, past president of the University of Michigan Club, vice president of Michigan Medical Service, served eight years on the Board of Directors of Michigan Hospital Service, and is a member of the Torch Club.

In professional organizations, he is past president of the Southern Michigan Triological Association, past vice president of the Detroit Otolaryngological Association, past president and secretary for ten years of the Calhoun County Medical Society, and life member of the American Academy of Ophthalmology and Otolaryngology.

Dr. Haughey, at the present time, is Chief of Eye, Ear, Nose and Throat, at Battle Creek Sanitarium, Chief of Ophthalmology of Leila Hospital, on the staff of Community Hospital, and is consultant for Veteran's Hospital and the Roosevelt American Legion Hospital.

*Editor's Note:* The members of The Council, Michigan State Medical Society, will be featured in the March and April, 1949, issues.

Expenditures of Federal Security Agency, 1946-1950  
(In millions)

1946	1947	1948	1949	1950 (estimated)
				Under existing legislation
\$743	\$928	\$1,028	\$1,370	\$1,511
				Under proposed legislation
				\$1,897

†Source: The Budget of the United States Government for the Fiscal Year Ending June 30, 1950, Washington, 1949, p. 1386.



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

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## LEADING CAUSES OF DEATH CHANGE

When all the figures have been tallied, the year 1948 will be known as the healthiest in Michigan's history.

The death rate for 1948 will be the lowest in the state's history. On the basis of the first ten months figures, the state's death rate will drop to 9.15 per 1,000 population as compared with the rate of 9.36 in 1947 and the previous low of 9.52 in 1942.

The incidence of communicable disease and the death rate from communicable disease in the state will reach an all-time low. Infant and maternal death rates will also be at all-time lows.

Judging from the first nine months of the year the ten leading causes of death will undergo several changes. The only two communicable diseases among major causes of death will move down the list; pneumonia from sixth to seventh place, and tuberculosis from eighth to ninth place. Both prematurity and diabetes will move up; prematurity from seventh to sixth place and diabetes from ninth to eighth place.

Heart disease will continue to lead all other causes of death. There will be about two and one-third times as many deaths from this as from the next cause of death—cancer. During the first nine months of 1948, heart disease caused 13,936 deaths in comparison with 13,705 for the same period in 1947.

The ten leading causes of death for the year will be: heart disease, cancer, apoplexy, accidents, inflammation of the kidney, premature births, pneumonias, diabetes, tuberculosis, and arteriosclerosis.

## ASSIGNED TO DISEASE CONTROL

Robert William Menges, D.V.M., M.P.H., has succeeded Arthur H. Wolff, D.V.M., in the salmonella and rabies work of the Bureau of Disease Control, Michigan Department of Health. Dr. Wolff left January 1 for a new assignment with Public Health Service in Bethesda, Maryland. He will do research on anthrax at the National Institute of Health. Dr. Menges came to Michigan from an assignment in Mexico where he worked on control of hoof and mouth disease among cattle.

## REPORT INFANT CARE CHARGES AT ONCE

The activity in the maternity phase of the Emergency Maternity and Infant Care program in Michigan ended with the year 1948. The last outstanding bill for maternity care was received and paid in December.

As a result of action taken by Congress in April, 1948, to liquidate the program, no authorizations to pay for medical and hospital maternity care of servicemen's wives have been issued by the Michigan Department of Health since July 1, 1948, and settlement of all maternity cases authorized prior to that established deadline has been accomplished in the ensuing six months.

Little more than five months remain to conclude the infant care portion of the program. The deadline for infant care is April 4, 1949. At that time all infants whose mothers received care under the program will have reached the age of one year and will no longer be eligible for medical and hospital care.

Since no funds will be available after July 1, 1949, for payment on outstanding authorizations for infant care, doctors and hospitals are urged to submit their invoices for services rendered under the program.

## FREE PENICILLIN FOR GONORRHEA TREATMENT

The Michigan Department of Health, Bureau of Venereal Disease Control, has made penicillin available for distribution to private physicians for the treatment of gonorrhea. This penicillin will be supplied to local health departments and will be distributed to private physicians by them on a replacement basis. The Department feels that this procedure will be an additional measure toward the control of the venereal diseases. The penicillin will be distributed without cost to the private physicians for use with their private patients in their own offices.

The penicillin available for distribution is procaine penicillin in oil which can be administered in one treatment by the doctor. Experience has shown that one treatment of 300,000 units of penicillin will cure most cases of gonorrhea. Very few patients will require re-treatment.

## RECORDS OF LABORATORY EXAMINATIONS

The laboratories of the Department are now keeping on file for a minimum of one year, the original records of laboratory specimens with the following exceptions: (1) Syphilis and tuberculosis, two years; (2) histopathology and toxicology, permanently; and (3) sanitary bacteriology and chemistry, which are filed with the Bureau of Engineering.

## BIOLOGIC PRODUCTS ANNIVERSARY

January marked the 27th anniversary of the Michigan Department of Health's free distribution of biologic products for the prevention, diagnosis and treatment of disease.

Michigan was one of the first states to provide biologic products free to the physicians of the state. This was begun in January, 1922, with a product for treatment of diphtheria.

During the 1947-48 fiscal year, the Michigan Department of Health laboratories manufactured 2,534,125 doses of biologic and other products which were distributed free to physicians of the state. These included

*(Continued on Page 234)*

# Bowel Management of the Irritable Colon . . .

---

"As an aid in reestablishing a normal rhythm, the temporary use of a bland bulk-producer . . . may be beneficial. . . Patients having irritable colon who believe they are suffering from constipation commonly use high-residue diets, . . . They may not realize that this practice is similar to using irritating cathartics or large enemas and often increases the tendency to constipation by increasing spasm of the colon."\*



Metamucil is "a bland bulk-producer" which gently initiates reflex peristalsis and movement of the intestinal contents. The "smoothage" therapy of Metamucil encourages a return of the normal function of the colon without irritating the mucosa.

## METAMUCIL®

is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent.

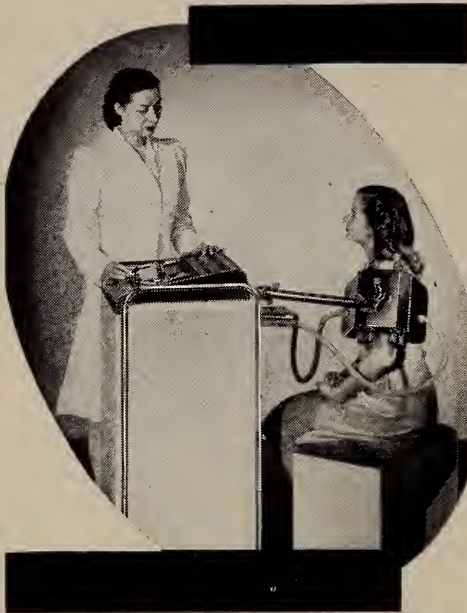


**SEARLE** RESEARCH IN THE SERVICE OF MEDICINE

---

\*Collins, E. N.: The Diagnosis and Treatment of Irritable Colon: Physiologic, Local, Irritative and Psychosomatic Factors, *M. Clin. North America* 32:398 (March) 1948.





**for effective heating-  
for increased  
blood flow--**



A recently completed study by an outstanding group\* reveals that in humans as well as in animals a significant increase in blood flow accompanies efficient diathermic heating.

\*Wakim, K. G.; Gersten, J. W.; Herrick, J. F.; Elkins, E. C.; Krusen, F. H. and Porter, A. N.: The Effects of Diathermy on the Flow of Blood in the Extremities, Arch. Physical Medicine, 29:583-93 (Sept.) 1948.

## **The BURDICK X 85 SHORT WAVE DIATHERMY Crystal Controlled**

—meets the rigid requirements of the Council on Physical Medicine of the American Medical Association for efficient heating. It produces deep heating and has the capacity to heat an entire extremity or other large area, as well as adaptability for treating small localized areas.

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Detroit 1, Mich.

## **BIOLOGIC PRODUCTS ANNIVERSARY**

(Continued from Page 232)

products for the prevention, treatment, or diagnosis of such illnesses as diphtheria, smallpox, whooping cough, typhoid fever, tetanus, rabies, scarlet fever, influenzal and meningococcic meningitis, tuberculosis, syphilis and gonorrheal ophthalmia. They also included blood plasma. These products are produced in the Lansing laboratories of the Department.

## **VISIT DEPARTMENT**

Dr. Erkki Leppo, Finland's representative to the World Health Organization and former director of Finland's local health services, visited the Michigan Department of Health in late December. Dr. Leppo visited in Michigan ten years ago when he met and married Dr. Pearl Toivonen, then director of the Ontonagon Health Department. Dr. Pearl Leppo recently accepted a position as director of the Mason County Health Department. In the interim they have made their home in Finland.

Another December visitor to the Department was Dr. H. E. Henkel, health officer from Hesse, a county of 50,000, in Germany. His visit was arranged by the Public Health Service for the Office of Military Government in Germany.

## **NEGRO HEALTH WEEK**

The thirty-fifth annual observance of National Negro Health Week will be held April 3 to 10, according to Public Health Service. This year's objective for the week is "Co-operate with Your Local Health Agencies and Your Neighbors for Better Health and Sanitation in Your Community."

## **INCIDENCE OF COMMUNICABLE DISEASE**

Disease	December, 1948	December, 1947
*Diphtheria .....	12	14
Gonorrhea .....	700	862
*Lobar pneumonia.....	76	82
*Measles .....	1496	3096
*Meningococcic meningitis....	9	7
*Pertussis .....	122	644
*Poliomyelitis .....	24	23
*Scarlet fever.....	917	446
Syphilis .....	861	1069
Tuberculosis .....	551	650
*Typhoid fever.....	2	8
*Undulant fever.....	16	44
Smallpox .....	0	0

\*Provisional figures.

## **WATER AND SEWAGE COURSES BEING GIVEN**

For the fifth consecutive year extension courses for water works and sewage works operators are being offered through the co-operation of the Departments of Health and Public Instruction, the University of Michigan, the Michigan Section of the American Water Works Association and the Michigan Sewage Works Association.

Classes which meet once a week for twelve to fourteen weeks are being held in six cities. This year, for the first

time, two-, three- or five-day institutes on water and sewage works problems are planned. They are to be held early in April, one in Traverse City, and the other in Iron Mountain, Escanaba or Marquette. Bacteriology, biology, stream pollution, industrial waste disposal, and engineering will be among the subjects considered.

## DETROIT PHYSIOLOGICAL SOCIETY

### Gastric Secretory Response

(Continued from Page 218)

combination of hypermotility and acid stimulation. The concurrent administration of oral anti-acids may be advisable in such patients.

The gastric response to intravenous amino acids may possibly be used to supplement other measures in the evaluation of vagotomy patients pre-operatively and postoperatively. This is being investigated further at the present time.

### The Relationship Between Spontaneous Activity and the Basal Metabolic Rate as Influenced by Certain Sympathomimetic Compounds

F. A. Waterman, Wayne University, Detroit, Michigan.

With the increase in number of sympathomimetic amines in use and under investigation for their circulatory effects it becomes necessary to study their effects on the central nervous system with ever-increasing accuracy. The apparatus used has been described by Waterman (*Sci.* 106:499). This apparatus was tested by using, as controls, albino rats injected with normal saline, comparing them with dl-Benzedrine HCl and Neosynephrine HCl.

The d and l isomers of N-methyl-cyclohexylisopropylamine HCl were studied. The d isomer was found to be more stimulating than the l form. This is not in agreement with reports by other workers in the field.

Studies of oxygen consumption showed that the basal metabolic rate paralleled the activity studies as influenced by these compounds.

Another compound, 1(3<sup>1</sup>, 4<sup>1</sup>-dihydroxyphenyl)-2-isopropylamino-ethanol HCl (Isuprel) has no exciting effect upon the central nervous system at all. The animal is in complete collapse and the basal metabolic rate is high. This is probably due to the great amount of peripheral vasodilation which occurs along with the very rapid heart rate caused by the profound fall in blood pressure.



## SURGICAL CORSETS SPINAL BRACES ARTIFICIAL LIMBS LEG BRACES

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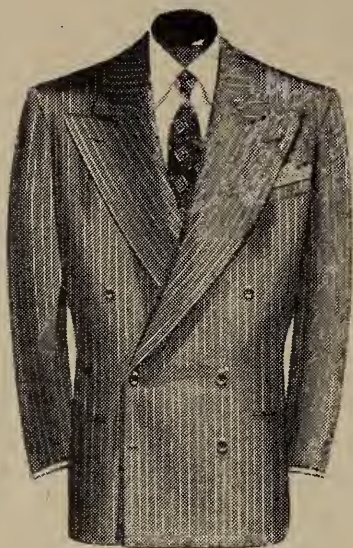
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## In Memoriam



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fitting  
service!*

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WILLIAM E. JEWETT, M.D., Adrian, Michigan, was born on June 11, 1872, in Adrian, Michigan, and graduated from the Starling Medical College, Columbus, Ohio, in 1897. Over a period of twelve years, Dr. Jewett continued his studies at the Postgraduate College and Hospital, Chicago, the Polyclinic Medical School and Hospital, New York, and the Postgraduate School and Hospital, New York. He was a Fellow in the American College of Surgeons, a Life Member of the Lenawee County Medical Society, the Michigan State Medical Society and the American Medical Association. Dr. Jewett had practiced for a period of fifty years in Adrian in the same location used by his father. He was a charter member of the New York Central Lines Surgeons Association and had been company surgeon since 1900. He was also company surgeon for the D. T. & I. Railroad for a period of twenty-six years. Dr. Jewett passed on, December 3, 1948, in Toledo, Ohio, at the age of seventy-six years.

THEOPHIL KLINGMAN, SR., M.D., of Ann Arbor, Michigan, was born in Scio Township, Washtenaw County, in 1868 and graduated from the University of Michigan Medical School in 1892. He also studied at the University of Leipzig, the University of Berlin and Cordia College, Fort Wayne, Indiana. Dr. Klingman was Director of the Mercywood Neuropsychiatric Hospital in Ann Arbor, was a former member of the Washtenaw County Medical Society, the American Medical Association and the Michigan State Medical Society. He was a member of the Michigan Society for Neurology and Psychiatry and the Association for Research in Nervous and Mental Diseases. He belonged to the Phi Beta Pi medical fraternity and Phi Delta Chi. Dr. Klingman was a member of the faculty of the University of Michigan from 1899 to 1920. He died on September 19, 1948, in Ann Arbor, Michigan, at the age of eighty years.

FRED E. MURPHY, M.D., of Traverse City, Michigan, was born in Petoskey, Michigan, in 1877 and graduated from the Wayne University College of Medicine in 1906. Dr. Murphy practiced medicine in Detroit, Grand Rapids, South Manitou Island, Leland, Lake Leelanau, for eighteen years in the Village of Cedar and for seven years in Traverse City, Michigan. He was a former member of the Grand Traverse County Medical Society, the American Medical Association and the Michigan State Medical Society. Dr. Murphy passed on, December 1, 1948, in Traverse City, Michigan, at the age of seventy-one years.

The citizen as a patient is the only thing to be considered. A man with an aching "tummy" wants relief rather than have his doctor delayed by filling a lot of forms.



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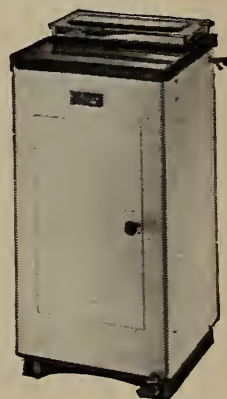
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## NEWS MEDICAL

"Better to light one candle than to curse the darkness."—An old Chinese Proverb.

\* \* \*

*Federal and State Narcotic Licenses.*—Be sure to renew these licenses before July 1, 1949.

\* \* \*

*Fulton Lewis, Jr.*, in his Mutual Network broadcast of January 4, 1949, took a withering blast at socialized medicine.

\* \* \*

*The Manistee County Medical Society* contributes \$100 annually—as of April 1—to the Michigan Foundation for Medical and Health Education.

\* \* \*

*Two hundred eighty-one* (281) guest essayists, from out of the State of Michigan, have appeared on the General Assembly programs at MSMS Annual Sessions from 1936 through 1948.

\* \* \*

*Lowell S. Goin, M.D.*, Los Angeles, and *J. Elliott Scarborough, Jr., M.D.*, Atlanta, have been appointed to the National Advisory Cancer Council by Surgeon General L. A. Scheele, USPHS.

\* \* \*

*Norman F. Miller, M.D.*, Ann Arbor, will be one of the speakers at the first annual scientific assembly of the American Academy of General Practice, Netherland Plaza Hotel, Cincinnati, March 7-8-9, 1949.

\* \* \*

*Louis J. Gariepy, M.D.*, and *Lawrence Wm. Gardner, M.D.*, Detroit, are authors of an original article "Primary Carcinoma of the Gall Bladder" which was published in the *Southern Surgeon*, December, 1948.

\* \* \*

*A. D. Allen, M.D.*, Bay City, and *John R. Rodger, M.D.*, Bellaire, have been re-appointed to the Michigan Advisory Hospital Council, office of Hospital Survey and Construction. Congratulations, Drs. Allen and Rodger!

\* \* \*

*The Houghton Lake General Hospital* was opened for inspection on Sunday, December 12. Residents of the Michigan resort area of Houghton Lake inspected the facilities of their new nonprofit hospital, now open to the public.

\* \* \*

*The Phi Beta Pi Quarterly.*—A letter from the Editor, Emmett B. Carmichael, Medical College of Alabama, Birmingham 5, Alabama, asks for back numbers of the *Phi Beta Pi Quarterly* which will be placed in medical libraries. All numbers are requested, but the last four or five years are especially desired.

*At the Centennial* of the Wayne County Medical Society, Congressman Walter H. Judd, M.D., will be speaker at the Centennial Dinner in the Fountain Ballroom of the Masonic Temple, Tuesday, April 26, 1949.

*A. C. Furstenberg, M.D.*, Ann Arbor, will appear before the Annual Clinical Conference of the Chicago Medical Society in Chicago on March 2. His subject is "Anti-biotics in the Treatment in Diseases of the Ear, Nose, and Throat."

\* \* \*

*Another fine activity* of the Wayne County Medical Society is its joint meeting with the Woman's Auxiliary, scheduled for March 7, which will feature dramatic and musical skits. Congratulations, Wayne County Medical Society!

\* \* \*

*The Jackson County Medical Society*, at its annual banquet on December 9, made Carl M. Saunders, Editor of the *Jackson Citizen Patriot*, an Honorary Member of the Society. A scroll was presented to Editor Saunders by retiring President E. H. Corley, M.D.

\* \* \*

*The Saginaw County Medical Society* is going to have a bulletin. Preliminary work on the new county medical society publication is being pursued by R. D. Mudd, M.D. Congratulations, Saginaw, on this move, and all success in the venture!

\* \* \*

*The Detroit Institute of Cancer Research* has just received a research grant of \$6,000 from the United States Public Health Service, National Cancer Institute, Federal Security Agency. The subject is Lipid studies in relation to carcinogenesis.

\* \* \*

*H. H. Gay, M.D.*, Midland, and *J. Duane Miller, M.D.*, Grand Rapids, were representatives of the Michigan State Medical Society at the Ninth Congress on Industrial Health, sponsored by the American Medical Association, held in Chicago last month.

\* \* \*

"Public Relations in the field of medicine is nothing more than mutual understanding, respect and sometimes affection. It is a high and continuing regard for the other fellow—your patient. He is a mighty important cog in the AMA public relations machine."—GEORGE F. LULL, M.D., in AMA Secretary's Letter, December 20, 1948.

H. Marvin Pollard, M.D., Henry C. Bryant, M.D., Malcolm Block, M.D., and Winston C. Hall, M.D., of Ann Arbor, are authors of an original article "Diagnosis of Gastric Neoplasms" which appeared in JAMA of January 8.

\* \* \*

A chiropractor certificate does not satisfy the requirements of an adequate physical examination for students in Michigan schools, according to a recent opinion of the Michigan Attorney General, which points out that chiropractors are limited by law to manual manipulation of the human spine and surrounding bone and tissue.

\* \* \*

The Seventh International Congress on Rheumatic Diseases, conducted by the American Rheumatism Association will be held at the Waldorf-Astoria Hotel, New York, May 30-June 3, 1949. For program and information, write President Ralph Pemberton, M.D., 1901 Walnut St., Philadelphia.

\* \* \*

The "Schering Physicians' Income Tax Guide" is being distributed to the medical profession by Schering Corporation of Bloomfield, N. J. This compilation is a 93-page informative booklet on the proper completion of federal income tax estimates and returns. Clear and concise information is to be found in this worthwhile booklet.

\* \* \*

The Third Inter-American Congress of Radiology will be held at Santiago, Chile, November 11-17, 1949.

When making plans to attend the Radiology Congress, write James T. Case, M.D., 55 E. Washington St., Chicago 2, Illinois, Chairman of the Committee on International Affairs of the Congress.

\* \* \*

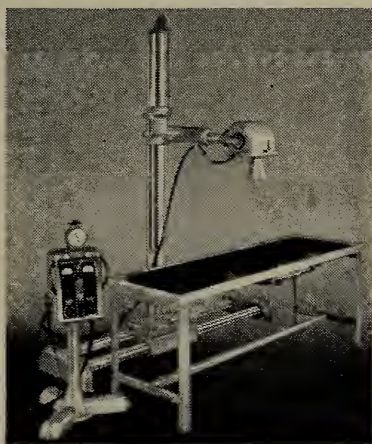
The Wayne County Medical Society is to be congratulated on its "Get Acquainted After Glow" for residents and interns, held January 17, after the monthly scientific meeting. The After Glow was held in the David Whitney House, Headquarters, at Woodward and Canfield, Detroit, of the Wayne County Medical Society.

\* \* \*

The Haven Sanitarium, Inc., of Rochester, Michigan, announces the association of Emil L. Froelicher, M.D., as clinical director and Hilbert DeLawter, M.D., as a resident staff psychiatrist. The addition of this personnel will make space and therapy available for a greater number of mentally and emotionally ill people at the sanitarium.

\* \* \*

Morris Fishbein, M.D., Chicago, Editor JAMA, will be the guest speaker at the regular monthly meeting of the Detroit Accident & Health Association, Tuesday, March 8, at 12 noon in the Detroit Leland Hotel. Dr. Fishbein will speak on "Health and Social Security." Physicians are cordially invited to attend. For reservations, call Mr. Jack Whiting, President of the Detroit Accident & Health Association, Woodward 5-3040.



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On the Saturday following the 1950 (not 1949) Michigan Postgraduate Clinical Institute, scheduled for the Book-Cadillac Hotel, the week of March 6, 1950, an "Obstetrics Day" will be held at the Book-Cadillac. The exact date will be Saturday, March 11, 1950. A program of outstanding obstetricians will be presented.

\* \* \*

George M. Wheatley, M.D., New York City, has been appointed Third Vice President of the Metropolitan Life Insurance Company. He will assist in the supervision of the Company's health and welfare activities. Dr. Wheatley is one of the guest speakers on the "Heart and Rheumatic Fever Day" Program, scheduled for the Book-Cadillac Hotel, Detroit, Saturday, March 26, 1949.

\* \* \*

Clark D. Brooks, M.D., and L. J. Gariepy, M.D., of Detroit, were guest speakers at the third Southern Assembly of the United States Chapter, International College of Surgeons, in Miami, January 20-21, 1948. Dr. Gariepy spoke on "Gall-bladder Surgery" on January 20; Dr. Brooks' subject on January 21 was "Surgical Treatment of Acute Emergencies."

\* \* \*

R. H. Pino, M.D., spoke to the faculty and student body of Berea College, Berea, Kentucky, on January 14. His subject was "Medical Associates." He also will address a meeting of the Academy of Ophthalmology and Otolaryngology in Harrisburg, Pa., on April 23; his topic will be "Medical Associates as It Relates to Ophthalmological Economics."

\* \* \*

*Social Security Tax.*—Every professional man, doctor, dentist, lawyer, writer, self-employed person will be required to pay twice the amount in the compulsory SS or Health Insurance as is collected from the employed person, because he will have to pay both as employee and employer. If the employee pays one and a half per cent he will pay three per cent of his gross income up to \$4,800.

\* \* \*

The British Medical Journal printed a recent complaint against the Ministry of Health which was accused of unfairness in refusing free spectacles to all persons whose pupils are more than 2.8 inches apart. The writer of the complaint stated: "Wider set eyes are not accepted by the Ministry as probably not conforming with the specifications of the human race as laid down by one of its committees."

\* \* \*

Isadore S. Falk, Director of the Bureau of Research and Statistics, U. S. Social Security Agency, is the man behind the Wagner-Murray-Dingell Bill. Mr. Falk controls his department completely, and when a labor leader or government official wants statistics on the cost of social insurance they are provided by him and him alone, thereby controlling all the information that is given out. Furthermore, these statistics are not only compiled by Mr. Falk but carry the Falk interpretation along with them when they are distributed.—Extract from *General Practice News*, December, 1948.

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The 1949 Assembly of the United States Chapter, International College of Surgeons, will be held at Chalfonte-Haddon Hall, Atlantic City, Tuesday, Wednesday, Thursday, Friday, November 8-9-10-11, 1949. The surgical clinics will be held in Philadelphia hospitals all day Monday, November 7, 1949.

The I. C. of S. Convocation will be held in the Ballroom of Convention Hall on Thursday, November 10. The Banquet will be in the Dining Room of Chalfonte Hotel on Friday, November 11.

\* \* \*

The Committee on Uniform Fee Schedule for Governmental Agencies has been augmented by Council Chairman O. O. Beck, M.D., Birmingham, with the following members: H. E. Bagley, M.D., Dearborn; A. O. Brown, M.D., Detroit; A. E. Catherwood, M.D., Detroit; Carleton Dean, M.D., Lansing; L. S. Fallis, M.D., Detroit; Carleton Fox, D.D.S., Detroit; C. K. Hasley, M.D., Detroit; T. H. Hunt, M.D., Detroit; L. W. Hull, M.D., Detroit; A. D. La Ferte, M.D., Detroit; and I. S. Schembeck, M.D., Detroit.

\* \* \*

Committees on Tuberculosis Control exist in the following Michigan county medical societies: Bay, Calhoun, Clinton, Genesee, Gogebic, Grand Traverse-Leelanau-Benzie, Ingham, Jackson, Kalamazoo, Kent, Manistee, Menominee and Van Buren.

Committees on Public Health exist in the following Michigan county medical societies: Bay, Calhoun, Clin-

ton, Gogebic, Grand Traverse-Leelanau-Benzie, Ingham, Jackson, Kalamazoo, Menominee, St. Clair, St. Joseph, Van Buren and Wayne.

\* \* \*

Bury with yesterday  
All that with yesterday did cease to live.  
Turn then to today and do your best  
With what it has to give.  
Live you in yesterday?  
Then each today will be but yet another yesterday  
For you to muse upon in vain regret.  
Live only in today; It is enough.  
Give yesterday its sorrow.  
And then today will be a better yesterday—tomorrow.

FLOYD E. ARMSTRONG

\* \* \*

"Don't let us become a nation of hypochondriacs," pleaded Britain's Health Minister Aneurin Bevan, after five months' experience under national health service—the world's biggest experiment in socialized medicine. Mr. Bevan says that too many are demanding too much, which is to be expected when all bills are paid out of general taxation.

To ease the load the Health Ministry announced that beginning February 1, each dentist taking part in the service will be paid only half of anything he earns over 4,800 pounds a year.

It's the same old story of medical socialism: dilute the service and pauperize those who render the service!





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*The International College of Surgeons, United States Chapter*, at its 1948 Annual Assembly, honored the following Michigan physicians by electing them to Fellowship or membership:

*Fellows:* Milton R. Schmidt, M.D., Trenton, and R. H. Strange, M.D., Mt. Pleasant.

*Associate Fellows:* E. V. Gourley, M.D., Detroit, F. V. Hand, M.D., Detroit, R. N. Kilgore, M.D., Kalamazoo, J. J. Kraus, M.D., Detroit, Alfred LaBine, M.D., Houghton.

*Affiliate Fellows:* J. G. Arent, M.D., Detroit, W. F. Goins, M.D., Detroit.

*Matriculate Fellow:* H. O. Couche, M.D., Ferndale.

\* \* \*

*In discussing compulsory sickness insurance before lay groups*, have you ever stated that under such a scheme, the purchaser is being sold a noncancellable insurance policy? It differs from that purchased from an insurance company. With the latter, the policy cannot be cancelled by the company for the period of time stated thereon. Yet by nonpayment of the premium, the insured can automatically become relieved of further participation. With the proposed compulsory sickness insurance, they cannot fail to pay the tax assessment, or "premium," any more than they can refuse to pay income taxes or other taxes assessed by the government. This is a point to remember.—H. D. CAMP, M.D., Monmouth, Illinois, Secretary, Illinois State Medical Society.

\* \* \*

*Hospital Distribution.*—The map referred to in our editorial of areas more than thirty miles from general hospitals was published in 1937, and is not up to date. Many hospitals have been constructed since then. Thirteen counties were entirely outside the thirty-mile radius, population 67,800; 368 counties have a part of their area outside the thirty-mile radius. Estimating half of their population outside the limit gives 1,828,735, making 1.5 per cent of the entire U.S. populations more than thirty miles from a general hospital. Michigan has one small area in and near Montmorency County. Twelve states have no area more than thirty miles from a general hospital: New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Pennsylvania, Ohio, Indiana, Illinois and Iowa. (As of 1937.)

\* \* \*

*L. Fernald Foster, M.D.*, Bay City, MSMS Secretary, addressed the Bay City Lions Club on December 29 on "The National Health Program." He also was guest speaker at President's Night of the Ingham County Medical Society at the Olds Hotel, Lansing, on January 18; his topic was "Voluntary vs. Compulsory Health Insurance." Dr. Foster also addressed the Midland Rotary Club on January 13; his subject was "The Proposed New National Health Program." Also Dr. Foster will address the Woman's Auxiliary to the Wayne County Medical Society on April 8 at the David Whitney House, Woodward at Canfield, Detroit; his subject will be "The Place the Woman's Auxiliary Plays in Medical Public Relations." Dr. Foster addressed the Saginaw County Medical Society on January 25. His subject was "The Work of a County Society Mediation Committee."

*Mt. Carmel Mercy Hospital* in Detroit, *Mercy Hospital and Sanitarium* in Manistee, and *Mercy Hospital* in Bay City have again become Blue Cross participating hospitals. The participation of *Mt. Carmel Mercy Hospital* and *Mercy Hospital and Sanitarium* in the Blue Cross program became effective as of January first, and the participation of *Mercy Hospital, Bay City*, became effective January 10.

Only four of the thirteen Sisters of Mercy hospitals which withdrew from Blue Cross in 1946 do not now participate in Blue Cross. Those hospitals are *Mercy Hospital* at Grayling, *St. Joseph's Hospital* at Ann Arbor, *St. Joseph's Hospital* at Pontiac, and *St. Joseph's Hospital* in Detroit.

\* \* \*

The Michigan State Board of Registration in Medicine reports that the Chicago Medical School, 710 S. Wolcott Avenue, Chicago, is approved by the State Board of Registration in Medicine, effective November 9, 1948. By this action all students in regular attendance at this school on graduation will be considered by the Michigan Medical Board to be graduates of an approved medical school. This action does not apply to students who completed their formal academic education at the school, or to physicians who graduated from the school, prior to November 9, 1948. The present senior class and those students graduated in future by the Chicago Medical School will be eligible for appointments in Michigan hospitals approved for rotating internship training by the

State Medical Board, and will be eligible for registration and licensure to practice medicine in Michigan upon completion of 12 months' satisfactory hospital service.

\* \* \*

*Anti-Trust Suits.*—In the December number of the JOURNAL we reprinted the charges and prayer of the Attorney General of the United States in the suit in Oregon, charging violation of the Sherman Anti-trust Law. The Harness Committee in its third report published last summer exposed the use of federal funds and employes in the propaganda for socialized medicine, and called upon the Attorney General to prosecute. This was not done, but a case was brought against one of the voluntary prepayment medical plans, in an evident effort to discredit the outstanding thing medicine was trying to do to make medical service available to everyone who wished to have it. Why was a suit not brought against R. Ewing, Isadore S. Falk, Arthur J. Altmeyer, et al? Has the government bureaucracy attained so much power it is immune to punishment for violation of the law, but can prosecute the innocent group who are trying to serve the people?

\* \* \*

*Henry J. Taylor*, noted economist, author and journalist, spoke on "Socialism A Politician's Paradise" over the ABC Network on December 27. A pungent extract from this timely and strong talk: "Let Social Security Administrator Ewing lay his socialist hand on one single

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doctor, and he will do so to your peril—whoever you may be and whatever work you may do—and to the peril of this country. For if doctors can be socialized, why cannot dairymen be socialized. More people need milk every day than need doctors. Why cannot any business be nationalized? . . . If socialization of doctors is good for society—no matter how bad it is for doctors themselves—why isn't socialization of anything equally good for society? The answer is that socialization *isn't* good for society—that it finally turns out simply to be a politician's paradise."

For copies of Mr. Taylor's enlightening radio talk write Henry J. Taylor, care of General Motors, Detroit 2, Michigan.

\* \* \*

*Hippocratic Oath Amendment.*—A rather unique procedure took place at the meeting of the World Medical Association held in New York recently. It was an amendment to the Hippocratic Oath, which was approved by the Association. It is the first amendment to this honored document in two thousand years.

The object of the proposed amendment is to prevent medical crimes in the event of another war, such as using human beings for experiments, permitting mass killings and deliberate starvation. In recent trials some German physicians were found guilty of these crimes in World War II.

The new oath, which supplements the Hippocratic Oath, reads as follows:

"My first duty, above all other duties written or unwritten, shall be to care to the best of my ability for any person who is entrusted to or entrusts himself to me, to respect his moral liberty, to resist any ill treatment that may be inflicted on him, and in this connection refuse my consent to any authority that requires me to ill-treat him. Whether my patient be my friend or my enemy, even in time of war or in internal disturbances, and whatever may be his opinions, his race, his party, his social class, his country, or his religion, my treatment and my respect for his human dignity shall be unaffected by such factors."—Editorial, *The Pennsylvania Medical Journal*, November, 1948.

\* \* \*

*Veterans' Care.*—A recent release from the Veterans Administration in Washington reports nearly 2,000,000 veterans received out-patient treatment by the Veterans Administration during the fiscal year ending June 30, 1948. These treatments were given at regional offices, hospitals and clinics, and by private physicians in providing "home town" care for veterans with service-connected disabilities. Private physicians treated 761,185 veterans, about 40 per cent of the total treated, and were paid \$11,437,870.00 or an average of \$15.03 per veteran. Staff doctors treated 1,176,657 individual veterans.

The veteran population of the United States as of October 31, 1948, was: living veterans 18,805,000, World War II veterans 14,997,000, VA patients in hospitals 105,141. In VA hospitals 92,956, with service-connected disability, 30,649; non-service-connected disability, 61,100; non-veterans, patients temporarily in hospitals and patients under observation, 1,207; in non-



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VA hospitals, 12,185; service connected disability 4,645; non-service-connected disability 7,507; all others, 33.

Two new hospitals were completed during the month of October and two during the month of November. There are now eighty-nine VA hospitals in progress of construction, thirty-one of which have contracts awarded, fourteen design completed but construction contracts not awarded, forty-two design in progress and two design not started.

\* \* \*

*House Approves a National Enrollment Agency.*—The proposal of Associated Medical Care Plans to form a national insurance company in co-operation with Blue Cross was given full consideration by the House of Delegates at St. Louis. The matter was referred to the Reference Committee on Medical Service and Prepayment Plans and final action was taken by the House only after this Reference Committee had studied the Supplementary Report of the Council on Medical Service and held an open session, lasting three hours.

In the final action by the House of Delegates, the Council's Supplementary Report on the A.M.C.P. proposal was adopted with one addition as recommended by the Reference Committee.

By this action, the House approved the formation of a national enrollment agency and the further development of co-ordination of and reciprocity among the local plans—and disapproved the proposal for a national insurance company. It also approved the statement delineating the field of operation of the Council on Medical

Service and A.M.C.P., together with the recommendations that A.M.C.P. make necessary changes in its Constitution and By-Laws which would take it out of the policy-making field.

Finally, the action of the House reaffirmed the Council's authority to promote the voluntary prepayment medical care plan movement in America.—A.M.A. *Secretary's Letter*, Dec. 13, 1948.

\* \* \*

*Michigan Medical Authors* include the following:

Read M. Nesbitt published a paper in *Postgraduate Medicine* for August on "Treatment for Prostatic Cancer."

Conrad R. Lam, M.D.; D. Emerick Szilagyi, M.D., and Magda Puppenthal, M.D., have a paper, "Tantalum Gauze in the Repair of Large Postoperative Ventral Hernias" in the August *Archives of Surgery*.

The article by Frederic E. B. Foley, M.D., of Saint Paul, Minnesota, "The Part of the General Practitioner in Management of Vesical Neck Obstruction," published in our May JOURNAL has been re-published in the November issue of *The General Practitioner* of Australia and New Zealand.

*Archives of Surgery*, September, 1948, was particularly Michigan, containing five papers by Michigan authors:

"Treatment of Tetanus," by Homer M. Smathers, M.D., and Milton R. Weed, M.D., Detroit.

"Surgical Removal of Unsuspected Mediastinal Lymphoblastomas: Report of Four Cases and a Review of



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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting February 7, March 7.  
Surgical Anatomy and Clinical Surgery, two weeks, starting February 21, March 21, April 18.  
Surgery of Colon and Rectum, one week, starting March 7, April 11.  
Surgical Pathology, every two weeks.

**GYNECOLOGY**—Intensive Course, two weeks, starting February 21, March 21.  
Vaginal Approach to Pelvic Surgery, one week, starting February 14, April 4.

**OBSTETRICS**—Intensive Course, two weeks, starting March 7, April 4.

**MEDICINE**—Intensive Course, two weeks, starting April 4.  
Personal Course in Gastroscopy, two weeks, starting March 7.  
Electrocardiography, four weeks, starting March 16.

**PEDIATRICS**—Intensive Course, two weeks, starting April 4.

**DERMATOLOGY**—Formal Course, two weeks, starting May 2.  
Clinical Course every two weeks.

**CYSTOSCOPY**—Ten-Day Practical Course Every Two Weeks.

**ROENTGENOLOGY**—Lecture and Diagnostic Course two weeks, starting the first Monday of every month.  
Clinical Course starting third Monday of every month.

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the Literature." Byron H. Evans, M.D., and Cameron Haight, M.D., Ann Arbor.

"Anatomical Study of the Vagus Nerves, with a Technique of Transabdominal Selective Gastric Vagus Resection." Richard G. Jackson, M.D., Ann Arbor.

"Testosterone Propionate in Treatment of Recurrent Cancer of the Breast." Arthur G. McGraw, M.D., Detroit.

"Modern Surgical Treatment of Acute Subdural Abscess." E. S. Gurdjian, M.D., and John E. Webster, M.D., Detroit.

\* \* \*

*The Cost of Medical Care in the U.S.—The Department of Commerce data show that consumer expenditures for medical care rose from \$4.9 billion in 1944 to \$6.5 billion in 1947, or 34 per cent, while total consumer expenditures rose from \$111.4 billion to \$164.8 billion, or 48 per cent. Expressed as a percentage of total consumer expenditures, the amount spent for all medical care items declined from 4.4 per cent in 1944 to 4.0 per cent in 1947. Within the medical care field, consumer expenditures for physicians' services rose from \$1.3 billion in 1944 to \$1.7 billion in 1947, or 24 per cent, while expenditures for hospitals rose 67 per cent, for drugs 26 per cent, for dentists' services 28 per cent and for all other medical care items combined 32 per cent. The percentage of total consumer expenditures for physicians' service declined from 1.2 in 1944 to 1.0 in 1947, while the percentage for hospitals rose from 0.7 to 0.8. Dr. Dickinson observes that these changes over the past four years are conditioned by the fact that 1944 was a year when 40 per cent of physicians were in the armed forces and the normal pattern of consumer expenditures was distorted by wartime shortages and rationing. Summarizing the data for 1944-1947, he notes that expenditures for medical care have increased, but less rapidly than total consumer expenditures. The percentage of the American family budget spent for medical care, particularly for physicians' services, has declined. The physicians' share of the medical care dollar has decreased from 27.4 cents in 1944 to 25.5 cents in 1947; meanwhile the hospitals' share has risen from 16.4 cents to 20.5 cents. "One might say that medical care has become increasingly expensive in the past four years but that, relative to the other items which make up the average consumer's budget, the cost of medical care has declined (in particular, the physicians' share of that cost)."—Insurance Economic Surveys, December, 1948.*

\* \* \*

*The AMA Defines Certain Medical Care Terms.*—When speaking before lay groups, it is important to know the meaning of the terms you use. At the Interim Session of the AMA held in St. Louis, the Council on Medical Service brought in recommendations as to proper definitions which were approved by the House of Delegates, and are given here for your information. In making talks speakers frequently use interchangeably the terms "state medicine," "socialized medicine," "compulsory health insurance," etc. Occasionally someone

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in the audience becomes confused at the variety of terms and may ask the difference. Here are your answers:

**Socialized Medicine:** Socialized medicine is a system of medical administration by which a government promises or attempts to provide for the medical needs of the entire population, or a large part thereof.

**State Medicine:** State medicine is a form of socialized medicine in which the government attempts to provide medical services directly to the general population from funds established by taxation.

**Sickness Insurance:** Sickness insurance is ostensibly a method of transferring the economic burden of sickness from the individual to the group. Sickness insurance may be voluntary or compulsory.

**Compulsory Sickness Insurance:** Compulsory sickness insurance is a system of sickness insurance in which all members of a given group of persons in a given governmental area are compelled by law to contribute to and be enrolled in the scheme. Any compulsory sickness insurance program under direct control of the state is socialized medicine, insurance principles no longer prevail and the compulsory contributions become a special tax.

**Voluntary Sickness Insurance:** Voluntary sickness insurance is that system whereby individual costs are spread over a period of time by a group of people who voluntarily band together to protect themselves against the economic burden of sickness. It involves the insurance principle and an organized system of payment.

It is popularly known as voluntary prepayment medical care insurance.

**Public Health:** Public Health includes those arrangements whereby the government provides medical services for special groups of persons and undertakes activities which are concerned with the protection of the health of the people as a whole. Public health is concerned with persons requiring institutionalized care, with those who are wards of the government, with the indigent, with proper sanitation and with the control and prevention of communicable diseases.

**Health Insurance:** Health insurance is used interchangeably with sickness insurance and usually means the same thing. It may be voluntary or compulsory, although national health insurance usually means compulsory sickness insurance.

**Group Medical Practice:** Group medical practice is the provision of medical service by a number of physicians working in systematic association with the joint use of equipment and technical personnel and with centralized administration and financial organization.

**Private Group Clinics:** The term private group clinics applies to organizations owned and managed by one or more physicians offering medical services. Services are usually supplied by one or more physicians who practice as a group, using joint office facilities and equipment. The physicians are under the supervision of a medical director.



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## FOURTH ANNUAL CANCER DAY

Genesee County Medical Society announces its Fourth Annual Cancer Day to be held Wednesday, April 13, 1949, in the Merliss Brown Auditorium, Hurley Hospital, Flint, Michigan.

### Program

9:30 A.M.—5:00 P.M.

"The Role of the Surgical Pathologist in Respect to the Cancer Problem"

*Arthur Purdy Stout, M.D.*, Associate Professor of Surgery, College of Physicians & Surgeons, Columbia University, New York City.

"Cancer in Children"

*Harold W. Dargeon, M.D.*, Attending Pediatrician, Memorial Hospital, New York City.

"Cancer of the Lower Bowel—Present Status of Management"

*Thomas E. Jones, M.D.*, Chief of Surgical Staff, Cleveland Clinic Foundation Hospital, Cleveland, Ohio.

"The Management of Uterine Cancer"

*Norman E. Miller, M.D.*, Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan.

"The Basic Principles in Cancer Management"

*Alton Ochsner, M.D.*, The William Henderson Professor and Director of Surgery, Tulane University, New Orleans, La.

## Cancer Day In Genesee County

Early in 1946 the Cancer Education Committee of the Genesee County Medical Society, under the chairmanship of George J. Curry, M.D., voluntarily assumed increased responsibility and promulgated the idea of presenting an educational program for the advancement of the study of cancer on a state-wide basis. On March 20, 1946, it presented its first Cancer Day Program. This and the ensuing annual programs were made possible through the voluntary generosity of Mr. Donald E. Johnson, publisher of the *Flint News-Advertiser*. All the programs have consisted of five one-hour presentations on timely topics directly concerned with cancer problems, by outstanding authorities in various cancer fields.

The presentations for the 1946 program were:

"Cutaneous Malignancy" by Paul A. O'Leary, M.D., Director, Division of Dermatology, Mayo Clinic, Rochester, Minnesota.

"Cancer of the Uterus" by Louis E. Phaneuf, M.D., Professor of Gynecology, Tufts Medical School, Boston, Massachusetts.

"Cancer of the Stomach" by Frederick A. Collier, M.D., Professor of Surgery, Medical School, University of Michigan.

"Cancer of the Genito-Urinary Tract" by Charles B. Huggins, M.D., Professor of Surgery, Dept. of Urology, University of Chicago School of Medicine.

"Cancer of the Breast" by Frank E. Adair, M.D., Clinical Director of Surgery, Memorial Hospital, New York City, President of the American Cancer Society.

This first meeting was attended by 210 physicians, 109



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from Genesee County, 100 from other Michigan counties, and one from outside of the State of Michigan.

The second program as presented on March 19, 1947, was:

"Cancer of the Upper Respiratory Tract" by A. C. Furstenberg, M.D., Dean and Professor of Otolaryngology, University of Michigan Medical School.

"Cancer Diagnosis—Laboratory Methods" by George N. Papanicolaou, M.D., Associate Professor of Anatomy, Cornell University Medical School, New York City.

"Cancer of the Colon and Rectum—The Modern Concept of Management" by G. Gavin, M.D., Professor of Surgery, McGill University Medical School, Montreal, Canada.

"Cancer Research" by Charles F. Kettering, Detroit, Chief, Research Division, General Motor Corporation.

"Hormone Studies in Cancer" by Cornelius P. Rhoads, M.D., Medical Director, Memorial Hospital, New York City.

This program was attended by 172 physicians, 111 from Genesee County, 59 from other Michigan counties, and two from outside of the State of Michigan.

On March 31, 1948, the substance of the third program was:

"Cancer of the Osseous System" by Charles F. Branch, M.D., formerly Professor of Pathology, Boston University Medical School, Boston, Mass., Assistant Director of American College of Surgeons, Chicago.

"Cancer of the Lung" by Richard H. Overholt, M.D.,

Clinical Professor of Surgery, Tufts University Medical School, Boston, Massachusetts.

"The General Principles of Cancer Management" by Allen O. Whipple, M.D., Emeritus Valentine Mott Professor of Surgery, College of Physicians and Surgeons of Columbia University; Director of Surgery, Presbyterian Hospital; Director of Surgery, Memorial Hospital, New York City.

"Extensive Surgical Procedures for Cancer" by Alexander Brunschwig, M.D., formerly Professor of Surgery, University of Chicago, Attending Surgeon, Memorial Hospital, New York City.

"The Role of Radiotherapy in the Management of Cancer" by Manuel M. Garcia, M.D., Associate Professor of Radiology, Tulane University Medical School, New Orleans, La.

This program was attended by 212 physicians. Of these, 122 were from Genesee County, 85 from other Michigan counties and five from outside of the state.

Most members of the Genesee County Medical Society seem to feel that there is a steady increase in enthusiasm for the Cancer Day Programs. They credit this to the fact that the best speakers available for the presentation of time topics on cancer are obtained, and feel that a large measure of their success is due to the persistent efforts of a generous sponsor who has served without the knowledge of the general public.

HARDIE B. ELLIOTT, M.D., *Secretary*  
Cancer Education Committee  
Genesee County Medical Society



## Muskegon County Medical Society, Committee on Diabetes

Your committee wishes to report upon its activities during the year 1948. Most of the work of the committee was in preparation for the 1948 national Diabetes Week, but much of it aimed at a permanent program of education in the hope that many of the million unknown diabetics would find their way to the physicians' offices.

During the few days preceding Diabetes Week the committee arranged two articles in the *Muskegon Chronicle*. These were well placed in the paper and apparently were seen by many. The *Chronicle* came through with a very timely editorial at the start of the Week, for which we are extremely grateful. The A.F. of L. and the C.I.O. papers each carried an article about diabetes and the purpose of Diabetes Week.

There were three 15-minute programs on the local radio stations and numerous spot announcements. Some of the national radio chains carried announcements and one station carried a well planned hour long program arranged nationally.

A number of organizations in the county devoted parts of their programs to diabetes and the committee furnished speakers in most instances. These included P.T.A. unions, noonday luncheon clubs, Granges, and the District Nurses Association.

The case finding part of the program was conducted in two one-hour periods daily during Diabetes Week, at the Red Cross chapter house. Four hundred persons presented themselves for examination. Volunteer Red Cross workers filled out questionnaires for each, and blood and urine specimens were collected. The urine was tested for sugar with clintest tablets furnished by the Ames Company. The blood was tested for sugar by the Folin-Wu method in a local laboratory by two technicians hired for the work. They worked from seven to midnight each night that week.

Of the 400 persons so tested 363 showed normal urine and blood tests. Since these specimens were collected about one hour after a normal meal, 150 mg. per cent of blood sugar was used as the dividing point between normal and questionable. It is interesting to note that 160 of these 363 had one or more relatives with the disease. Since much of the publicity was aimed at the relatives of diabetics because of the higher incidence of the disease among them, the committee feels that this fact shows that the educational program must have been effective.

Fifteen persons appeared at the Red Cross who were known diabetics. Some of these apparently had been off their diets and had otherwise neglected their treatment for some time and were becoming concerned about their situation. Others were probably trying to save the price of an office visit. Ten of the fifteen were apparently out of control and five were in fairly good condition as far as these tests would reveal.

The remaining twenty-two cases included fourteen who had definite evidence that they were suffering from diabetes but who, as far as we could tell, did not know they had developed the disease. They all had blood



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sugar concentrations well above 200, glycosuria symptoms, and, in most instances, other diabetics in their families.

Eight persons showed either glycosuria or hyperglycemia, but would require further investigation by their physicians before the diagnoses could be determined.

It is the purpose of the committee to continue the educational features of the program throughout the year, urging members of diabetic families, and those who are developing symptoms to consult their physicians as soon as possible.

The total cost of the program to date has been \$231.48.

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#### THE PATIENT UNDER SOCIALIZED MEDICINE

The patient under socialized medicine—and that will include all of us—may well ask whether this plan will provide more doctors—or increase their skill.

Will it offer attractions to practitioners to leave big cities and go into rural or backwoods areas where they are most needed now?—*Detroit Free Press*, Dec. 27, 1948.

### THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

THE CASE AGAINST SOCIALIZED MEDICINE. By Lawrence Sullivan. Washington: The Statesman Press, National Press Building, 1948. Price, \$1.50.

This is a constructive analysis of the attempt to collectivize American Medicine. In a few chapters the author tells what socialized medicine is. American Medicine leads the world. He tells about the government propaganda mill, the Wagner-Murray-Dingel Bill. He points out the communistic origin of the plan, mentions what he calls prefabricated statistics. This is a wonderfully well-prepared book which every one should read, not alone doctors. "If you feel that you have any stake whatsoever in the fight for freedom and ordered liberty under law, you should read these vital pages."

EDUCATION FOR PROFESSIONAL RESPONSIBILITY. A Report of the Proceedings of the Inter-Professions Conference on Education for Professional Responsibility held at Buck Hill Falls, Pennsylvania, April 12, 13, and 14, 1948. Pittsburgh: Carnegie Press, 1948.

This book offers all the papers given at this conference, and they are largely philosophical inquiries into what to teach, how to teach, and who should be the teacher. There are two articles on the medical profession, the first by James H. Means, Jackson Professor of Clinical Medicine, Harvard University who asks, Who



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teaches the teacher to teach? He describes largely the methods used at Harvard to instill medical knowledge and acumen into the students. Eleanor E. Cockerill, Professor of Social Case Work, University of Pittsburgh "A Social Worker Looks at Medical Education." She is impressed with the earnestness of the medical students in general, but they find difficulty in joining forces with other groups. This is a very interesting symposium.

**PSYCHIATRY IN GENERAL PRACTICE.** By Melvin W. Thorner, M.D., D.Sc., Assistant Professor of Neurology, The Graduate School of Medicine, University of Pennsylvania. 659 pages. Philadelphia and London: W. B. Saunders Company, 1948. Price \$8.00.

The present postwar period has seen the publication of a large number of books on psychiatry. In many of these the authors indicate a desire to present the subject specifically for the student, general practitioner and the specialist in other fields. Most of these volumes follow the same basic outline and emphasize the same terminology and nomenclature. It is in this way that the avowed intent to write a book for the general practitioner is led into the same blind alleys and the result is criticism of psychiatric terminology and confusion in the minds of those the book is designed to help.

As one glances over the table of contents of Dr. Thorner's book it is immediately apparent that these remarks do not apply. In the first section he presents the plan of the book with chapters on organization and purpose. The second section, which is by far the largest and most interesting, covers merely "The People." It has chapters on intelligent, dull, unhappy, demented, confused and suspicious people. An extremely interesting and valuable chapter is on people and sex, in which he presents a readable review of the sexual factors in living as well as the deviations and aberrations of sex life together with the reactions to them. This second

section ends with an interesting chapter entitled "The Rest of Us." In this chapter there are descriptions of occasional aberrations as well as the temporary and mild deviations from the normal.

Section 3 on methods describes the examinations necessary to arrive at a psychiatric evaluation of the patient and includes a well written chapter on Chemotherapy. This chapter alone should be worth the price of the book to the general practitioner who undoubtedly finds it necessary to use large amounts of the various different sedative drugs that are available. Here one will find indications for use of these drugs as well as a description of the actions and results of their use. The last chapter describing the therapeutic aims indicates what can be expected from psychotherapy in an understandable and practical fashion.

The fourth section of the book presents a brief classification of mental disorders in common use and a very interesting chapter on commitment procedures and includes a description of the legal machinery that so many doctors find so difficult to explain to the patient. The changes recommended in this legal machinery are interesting and if effected should provide for the patient about to be committed a much more hygienic situation than the one now in general use.

In summary this book is a readable, interesting, valuable and practical volume on psychiatry and psychiatric treatment and can be highly recommended to the general practitioner.—F. O. M.

**PREMATURE INFANTS.** A Manual for Physicians. By Ethel C. Dunham, M.D., Children's Bureau, Federal Security Administration. Washington: U. S. Government Printing Office, 1948. Price, \$1.25.

The transmittal letter from the Children's Bureau says 5 per cent of births are premature, and that they cause the largest single cause of all infant deaths in the first month of life, 50 per cent. "The tragedy is that many of

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these could be saved if given the specialized care needed." This book was prepared by a graduate of Johns Hopkins who has been with the Children's Bureau since 1927. The book is more or less outline in form, but contains much meat and many references and tables. If we get socialized medicine, this is probably a sample of the type of book we shall have at our command. It has its merits and its hoard of facts and suggestions, but we would have preferred to have it from a well-known practitioner.

**PATHOLOGY.** Edited by W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology and Bacteriology, Marquette University School of Medicine, Milwaukee, Wisconsin. With 1183 Illustrations and 10 Color Plates. St. Louis: The C. V. Mosby Company, 1948. Price, \$15.00.

Dr. Anderson says pathology should form the basis of every physician's thinking about his patients. Therefore, every physician must have at hand the latest on this all-important subject. It is not only the text of the student in college, but of every practitioner. This volume is made up of the combined work of experts in various phases of the subject. There are thirty-two collaborators, thus guaranteeing the latest knowledge, and the fact that nothing will be omitted.

The book is well and clearly printed on good paper, small type, but easily readable, and contains 1452 pages. Its completeness is testified to by our inability to find a pathological condition not covered in the text. A valuable book for the practitioner and student.

**PHYSICIAN'S HANDBOOK.** By John Warkentin, Ph.D., M.D., and Jack D. Lange, M.S., M.D. Fifth Edition. Palo Alto: University Medical Publishers (P.O. Box 761), 1948. Price, \$2.00.

This handbook is in imitation typewriting, single leaves, wire spring bound and summarizes the diagnostic procedures and the factual information the physician must have at hand. The book is pocket size and covers every field of medicine from the laboratory, and diagnostic methods to the clinical realm, metabolism diets, hormones, obstetric measurements, diabetes, drugs, anesthesia, acute poisoning, et cetera. In fact, it is very comprehensive for such a condensed volume.

**CONTEMPORARY RELIGIOUS JURISPRUDENCE.** By I. H. Rubenstein of the Illinois Bar. Chicago: The Waldain Press (P.O. Box 97), 1948. Price, \$2.50.

This treatise is written primarily to clarify the civil and criminal aspects of the major polemic tenets of fortune telling, faith healing and pacificism. The prob-

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lems engendered by the adherents to these tenets who are mostly religious zealots, in time of war or national crisis may be a matter of grave public concern. There is a history of fortune telling, with a discussion of its criminal aspects; the same for faith healing. Then there is a section about pacifism, and its prevalence in World War I and World War II. There are many quotations of law, and citations of cases dealing with these problems. The first exemption from military service was legalized in the Civil War when in 1862 by a statute exempting "all persons who have been or are now members of the Society of Friends, Nazarenes, Mennonites and Dunkards, provided they shall furnish a substitute or pay a tax of \$500, each." This book is full of interest and details that one would never find otherwise.

**HEALTH EDUCATION.** A publication of the Joint Committee on Health Problems in Education. Charles C. Wilson, M.D., Professor of Education and Public Health. Cloth, 413 pages. Chicago: The American Medical Association, 1948. Price \$3.00.

A completely rewritten edition of this standard textbook and guide for teacher education is now available. A revision committee was composed of Thurman B. Rice, M.D., Professor of Public Health, Indiana University, Bernice Moss, Ed.D., Department of Health and Physical Education, University of Utah, and W. W. Bauer, M.D., Director of Health Education for the American Medical Association. The contributed material of nearly one hundred outstanding leaders in health education has been organized into a comprehensive, readable, and up-to-date volume. Present day problems with solutions proved effective by experience are discussed in the twenty chapters under such titles as: Health Problems: Past, Present and Future; Solving School and Community Health Problems; Finding and Using Resources and Health Education in Action. The clear non-technical presentation of material makes "Health Education" an excellent textbook, or for supplementary reading.

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# Editorial

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## BLUE CROSS-BLUE SHIELD— WHAT THEY ARE

**T**HE BLUE CROSS national organization, developed a number of years ago, started first with a co-operative health service among a group of teachers at Baylor University in Texas. The movement for hospital services grew and finally reached Michigan in 1939. Our Michigan Hospital Service was first developed and sponsored by the hospitals of Michigan, together with the Michigan Hospital Association, and the active co-operation of the Michigan State Medical Society. That was before the name Blue Cross had been generally accepted.

Michigan Medical Service was the development of studies made by the Michigan State Medical Society committee on the distribution of medical care, but pioneered by independent groups in various parts of the state, especially Calhoun, Wayne, and Washtenaw Counties. When the organization was finally formed, working sales agreements and close co-operation were effected with Michigan Hospital Service. That was March 1, 1940.

The term "Blue Cross" is used nationally to indicate voluntary, non-profit hospital service organizations, like Michigan Hospital Service. The term "Blue Shield" is similar in designation, referring to the voluntary, non-profit medical and surgical plans, such as Michigan Medical Service. This term "Blue Shield" was adopted much later than the term "Blue Cross" and is well recognized and used throughout the nation. In Michigan, however, this is not entirely true. Our Michigan Medical Service had adopted the term "Blue Cross" and had so designated itself before the term "Blue Shield" was suggested. We believed that, inasmuch as the public in general, considers the two services as inter-related and essentially one package, it would not be wise to try to popularize the term "Blue Shield." Michigan Medical Service and Michigan Hospital Service, therefore, adopted an emblem which is a combination of the national Blue Cross emblem and Blue Shield emblem. The Blue Cross has a seal of the American Hospital Association in the center, and the Blue Shield, is a shield with a

caduceus in the center. This shield was made smaller and substituted for the American Hospital Association emblem in our Michigan design. That is the recognized emblem of the two services in Michigan and is recognized by our Michigan public and doctors of medicine.

### Socialized Medicine and Blue Shield

The campaign for compulsory health insurance throughout the nation has been gaining force for many years. It has been opposed officially and editorially by the medical profession with millions of letters against it and pages and pages of editorial opposition. The one thing which would prevent this extension of a socialized state, the offering of a substitute which would supply the needs of people, was not done until Michigan and some other progressive states developed our non-profit, prepayment medical care plans. We have advocated Michigan Medical Service as an answer to the socialized medicine program, knowing that it will cover the need in the question of catastrophic illness, can cover the indigent or low income by co-operation with relief agencies, and will avoid the pitfalls of unnecessary and nuisance demands upon the health services, medical, hospital, et cetera.

The American Medical Association has come to the same belief and is now, by direction of the House of Delegates, using the services of public relations officers to publicize the advantages of our voluntary, independent methods of practice. They will be advertising Blue Shield throughout the nation. We believe, therefore, that we should add the term "Blue Shield" in Michigan as a part of our designation. Michigan will have its own public relations program in opposition to socialized medicine or "compulsory health insurance," but we should tie this in with the national effort. That can best be done by adopting the same designation the rest of the nation uses.

### NATIONAL HEALTH FOR 1949

**T**HE DEMAND for National Health "Insurance" has been emphasized from administrative and governmental sources at every opportunity for several years. Claims were made after the election that a mandate had been given

*(Continued on Page 270)*

See page 364 for additional editorials.



# R.U.Q.

Signs and symptoms referable to the right upper quadrant can be clarified by a cardinal diagnostic step—oral cholecystography with PRIODAX.\* With this simple procedure, the diagnosis of chronic gallbladder disease can usually be definitively made or ruled out. Such precision stems from the rapid and almost complete absorption of PRIODAX.

With PRIODAX, the normal gallbladder is clearly and distinctly visualized; whereas nonvisualization or faint visualization almost always indicates cholecystic disease. Due to its optimal radiopacity, gallstones show up well, either as negative shadows (if radiolucent) or as shadows denser than the surrounding PRIODAX (if radiopaque).



## PRIODAX

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## NATIONAL HEALTH FOR 1949

*(Continued from Page 268)*

for national compulsory health insurance which is "Socialized Medicine." The President and Mr. Oscar Ewing, as well as others of the social planning group, so interpreted the election returns. The American Medical Association was stimulated into renewed opposition to the socialization program. Each member has been asked to contribute \$25.00 for a "Public Education Program" and for a new public relations regime, and to inform the public of our opposition to the socializing of medicine.

The medical profession has naturally, and very rightfully, manifested its opposition to the designs of the organized and thoroughly entrenched bureaucrats who are attempting to rob us of our privilege of private enterprise. We are opposed to this change. Our whole mode of life and practice could not be radically altered if there were not a need to be satisfied. We know that adequate medical-hospital-health care costs heavily, and to a certain percentage of our people a serious illness would be catastrophic. The social planners have seized this economic condition of modern life and have offered a "free," compulsory solution. The profession must not only fight for its untrammelled existence but more forceably for the retention of the best known system of medical care to the public. It must join with every well-disposed citizen to fight off State Socialism. The profession cannot hope for co-operation and success unless it offers a substitute for the bait held out by our clever, and designing officials of government who are making a tremendous fight for political power.

**Blue Shield is Prepared**

Fortunately, the medical profession and the hospital administrators, have at hand a natural answer—Blue Shield and Blue Cross. Our voluntary, non-profit, health plans were developed to cope with the very economic situation now prevailing. Our medical and hospital statesmen early recognized an economic need and established voluntary health groups, using the insurance principle—the well-developed and distinctly American approach of spreading costs and losses over large groups. We have been successful far beyond our dreams.

Mr. Ewing says in his "Report to the President" that our voluntary plans cannot succeed, that they

cannot give the service demanded. He sets up an outline of the service which he says must be rendered to the people—complete health care for everybody. But he admits his proposed compulsory medical plan cannot work unless by enormously increasing the number of hospital beds, doctors and dentists. He proposes a ten-year plan to make his scheme workable and forty years for completion.

The profession is constantly proving Ewing, Falk, Altmeyer, Wagner, Murray, and Truman to be wrong by the simple expedient of having given the American people the most adequate and efficient medical and hospital care ever offered any nation. We have done this under independent enterprise.

**Our Solution**

We have something definite and proven to offer the American people—a true extension of the private, independent, and ambitious way of life. Mr. Ewing has a theory to offer, but to carry out his theory he must completely revamp the most fundamental principle of American life—our private enterprise.

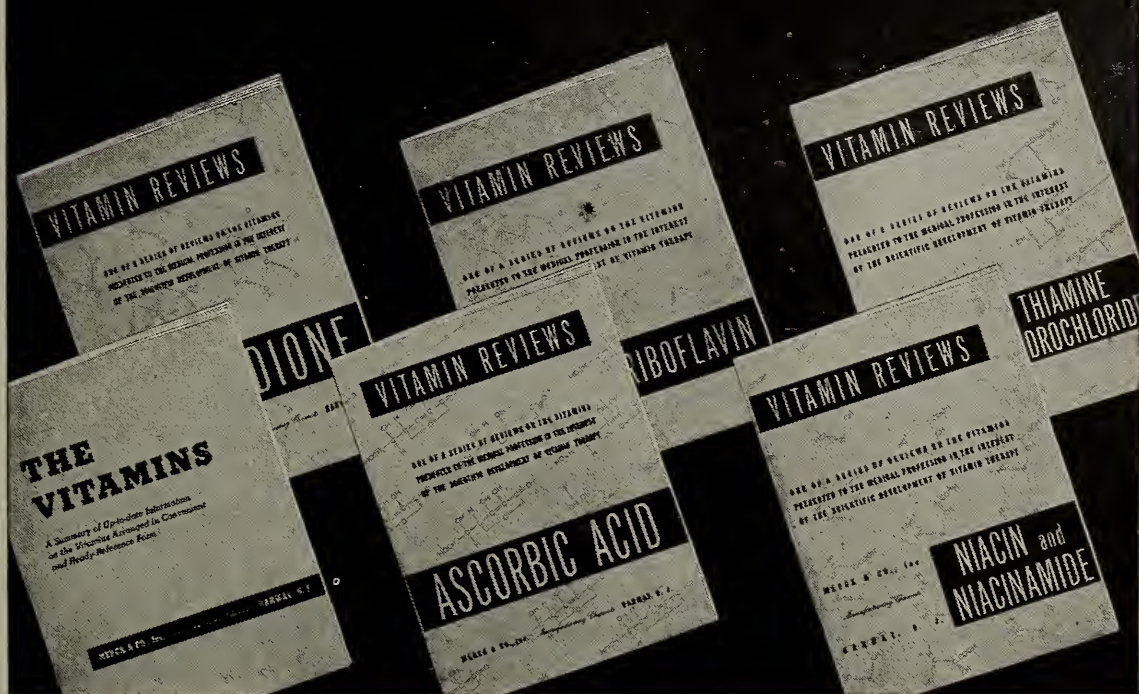
Michigan has proven our theory practicable. Michigan Medical Service and Michigan Hospital Service give a million and a half of our people secure assurance of protection from health catastrophe. Our doctors of medicine and our hospitals pioneered in developing the one actual defense we have against socialism. With our experience and facilities we can cover all of the field of medical care for which our people are willing to pay.

We now come to a serious milestone. The profession and the American people are right up against a revolution. Our private enterprise, our independence and our self-sufficient life, which have built this great nation, are being threatened. The American Medical Association has asked and expects us to contribute \$25.00 for its extended program. That alone is not enough. **We all must work actively to preserve our inheritance.** Of over 5,000 doctors in Michigan (4663 paying members last year), only 3547 are participating members of Michigan Medical Service. This is not so important, but a "recession" would make participation almost a must. The State Insurance Commissioner's office demanded an 80 per cent participation before allowing Michigan Medical Service

*(Continued on Page 272)*

# LATEST VITAMIN FACTS

*From Merck—where many of the vitamin factors were first synthesized.*



These six Merck *Vitamin Reviews* are yours for the asking while the editions last. These concise reviews contain up-to-date, authoritative facts and can be most useful for quick reference. Please address requests for copies to Merck & Co., Inc., Rahway, N. J.

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- Signs and symptoms of deficiency.
- Daily requirements and dosages.
- Distribution in foods.
- Methods of administration.
- Clinical use in specific conditions.

# MERCK VITAMINS



MERCK & CO., Inc.

*Manufacturing Chemists*

RAHWAY, N. J.



## NATIONAL HEALTH FOR 1949

*(Continued from Page 270)*

to start doing business because, as a "service organization" promising medical service to our subscribers, we must be able to prove our capacity to deliver.

The question is now being asked: "Are you doctors united and agreed in your program?" We are asking our friends to help us in our fight. Are we individually doing our part? As a profession, we have offered our solution of vast economic problems to the people of our state and nation. If we continue as individualists, rugged ones with pride in our work and accomplishments, we are doomed to defeat. One man's protest gets nowhere. Only united effort will protect what we and our patrons hold most dear.

## SABOTAGE!

OUR SERVICE PLANS are too much of a success. Mr. Ewing says they are inadequate and too weak, but Mr. Tom Clark, Attorney General acting for the United States of America, says they are a conspiracy in restraint of trade. Oregon State Medical Society and Oregon Physicians Service are now defending their existence in a suit brought under the Sherman Anti-trust Law. In California, a similar suit is in the state courts. Which State Medical Society will be next on the liquidation list?

The action taken against the American Medical Association, a few years ago, is being repeated. The easiest way to defeat a service program of a group like our medical societies and medical plans is to discredit them. Is the handwriting evident?

Government planners are getting ready for an all-out attack on private medicine. Half-hearted defense measures will not do! We must have a vigorous defense but most of all we must have a determined counter attack. We must offer a united and completely supported plan to give our people the care they need. We have it in our voluntary, non-profit, health care plans. Doctor, support them—and thus protect your patients and yourself.

## SOCIALIZED MEDICINE IN ENGLAND

SIR ARCHIBALD McINDOE, English surgeon, has recently toured the United States and made several speeches. He told about the increase in socialism and the effort by the Fabian Society to nationalize England's resources, labor, and pro-

duction. *The Rocky Mountain Medical Journal*, editorially states:

"England is financially broke and must find a way of paying for what she needs; at least one-half of the populace must be fed from outside resources. Her present social security program intends that every individual in the country shall be entitled to freedom from want from womb to tomb. This plan is expressed in three ways—unemployment and old age insurance, abolishment of industrial injuries compensation, and state control of all hospitals (except the teaching instructions).

"The doctors of England were given a plan of panel practice in keeping with the above, for the simple reason that they did not submit a plan of their own. (AMA please note!) A hostile people, the press, and the House of Commons resented what they interpreted, rightly or wrongly, as unfair or selfish financial ambition on the part of the doctors. Ninety per cent of the doctors voted against the plan, but there was no alternative to its acceptance. They were told that they did not have to go in, but each was at liberty to make his own living, if he could, out of the five per cent of people who did not accept or were not entitled to "free" medical care. Obviously very few physicians could afford to take such a risky gamble with essentially every wage-earner and his family entitled to medical care in return for compulsory withholding of the equivalent of one dollar and a half from his earnings. For this premium, he is entitled to old age benefits, medical and hospital care, industrial accident coverage and prosthesis—even including eye glasses.

"The doctors were offered what appeared to be a fairly attractive proposition; apparently luscious bait was placed in the trap to gain their co-operation, if not their enthusiasm. The physician ultimately, after his useful professional life, receives a pension which is two-thirds of the average income of the last three years of his practice. This pension does not die with him, if his wife survives, but is concluded with her death. The doctor is still entitled to earn all that his inclination and physical stamina will permit. But, as with any other Englishman, he cannot keep more than 3,200 pounds (approximately \$12,000), for the government takes all beyond that."

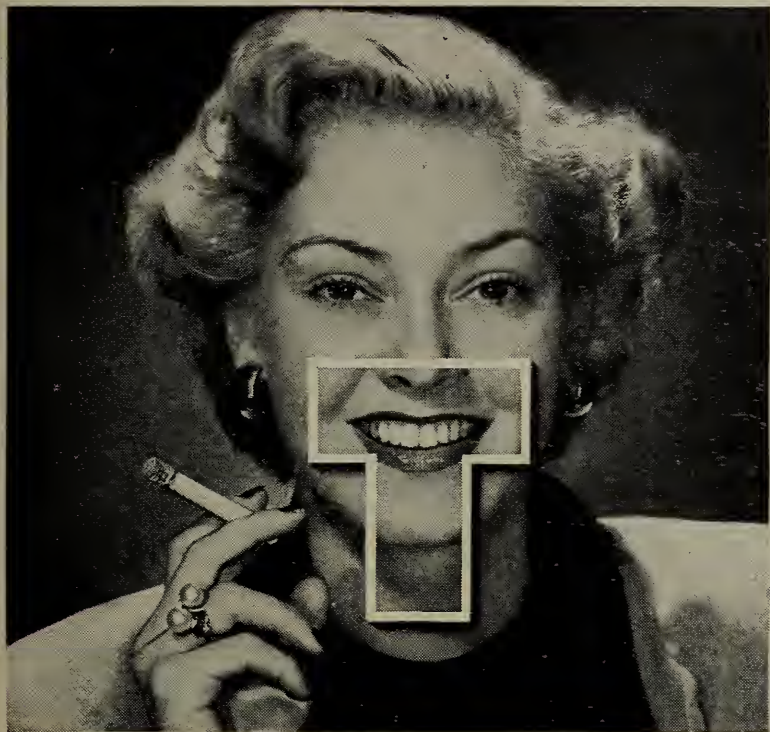
## FREE MEDICAL SERVICE

THE SURGEON GENERAL of the Army has recently announced the elimination of free medical and hospital services to the wives and dependents of Army personnel, enlisted or officers, which will be effective July 1, 1949. If the other services, the Navy and the Air Force, have not already done so, they will undoubtedly issue a similar order. Under the present regulation, the military is now caring for about 1,400,000 of these dependents situated at the various military establishments, and this creates quite a burden. But many of these establishments are in localities where there are no civilian doctors, and to abandon the care of these people will work a hardship on them.

This is a problem similar to that met by the Veterans Administration three years ago, and we believe the same solution could work here even better. It might be advisable for the military forces

*(Continued on Page 280)*

# *How mild can a cigarette be?*



**I**n a recent coast-to-coast test, hundreds of men and women smoked Camels—and only Camels—for 30 consecutive days. These people smoked on the average of one to two packages of Camels a day during the entire test period. Each week, throat specialists examined these Camel smokers. A total of 2,470 careful examinations were made by these doctors. After studying the results of the weekly examinations, these throat specialists reported:

## **“NOT ONE SINGLE CASE OF THROAT IRRITATION DUE TO SMOKING CAMELS!”**

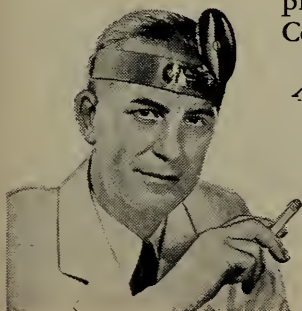
*Money-Back  
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Test Camel mildness for yourself in your own “T-Zone.” T for taste, T for throat. If, at any time, you are not convinced that Camels are the mildest cigarette you’ve ever smoked, return the package with the unused Camels and we will refund its full purchase price, plus postage. (Signed) R. J. Reynolds Tobacco Company, Winston-Salem, North Carolina.

*According to a Nationwide survey:*

### **MORE DOCTORS SMOKE CAMELS**

*than any other cigarette*



Doctors smoke for pleasure, too! And when three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!



# Foundation President's Report

Presented by E. I. Carr, M.D., Lansing, President of the Michigan Foundation for Medical and Health Education, Inc., at the Meeting of Members in Detroit, January 29, 1949.

During the early months of the existence of this Foundation, the activities were centered in fund raising. Probably the time will never come when

Michigan State College research of rural medical needs to which we contributed \$500.00.

From encouragement of this membership one



FOUNDATION RECEIVES \$25,317.00

E. I. Carr, M.D., President of the Michigan Foundation for Medical and Health Education, Inc., receives check from H. C. Hilliker, Trust Officer of the Detroit Trust Company for \$25,317.00 representing one-half the proceeds of the Estate of Mrs. Andrew P. Biddle, Deceased. Presentation was made before officers and members of the Foundation at Detroit, January 29, 1949.

(Seated) Wm. J. Burns, Secretary, Lansing; B. R. Corbus, M.D., Vice President, Grand Rapids; E. I. Carr, M.D., President, Lansing; H. C. Hilliker, Detroit Trust Company, Detroit; C. Stewart Baxter, Trustee, Detroit and J. M. Robb, M.D., Trustee, Detroit.

(Standing) P. L. Ledwidge, M.D., Detroit, Wilfrid Haughey, M.D., Battle Creek, A. S. Brunk, M.D., Detroit, P. A. Riley, M.D., Jackson, A. H. Miller, M.D., Gladstone, O. O. Beck, M.D., Birmingham, E. F. Sladek, M.D., Traverse City, J. Duane Miller, M.D., Grand Rapids, L. J. Hirschman, M.D., Detroit, L. Fernald Foster, M.D., Bay City, F. H. Drummond, M.D., Kawkawlin, W. S. Jones, M.D., Menominee, W. B. Harm, M.D., Detroit and C. E. Umphrey, MD., Detroit.

this effort can be relinquished. Organizations of this kind, of necessity, must continuously concentrate upon opportunities for resources with long-range planning for future incoming funds. As the work of administration of the Foundation progresses, projects and sponsorships tend to intrude upon fund-raising efforts. We, the membership, must never be unmindful of the continually growing need for increasing funds to carry on the expanding responsibilities which our own ambitions require and which are expected of this Foundation by the public.

During the past year, we have co-sponsored the following: Postgraduate Clinical Institute, Michigan Rural Health Conference, Michigan Heart and Rheumatic Fever Postgraduate Conference, Cancer Control Conference, and the

year ago, the Trustees formulated the following resolution:

"Appreciating the need for more doctors of medicine in rural areas, this Foundation proposes to establish a revolving loan fund to be known as the 'Fund for the Encouragement of Medical Practice in Rural Areas.' The administration of the program shall be under the direction of a Qualifications Committee. The funds shall be distributed in the form of loans to those students presently in the upper classes of the medical schools, or interns or residents in hospital service, who require financial help.

"The requirements of the fund shall be: (a) that the individual obtaining such aid shall be expected to practice in a rural area for a minimum of three years; (b) that the loan shall be without interest until the end of the individual's first year of practice; and (c) that such

(Continued on Page 276)



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DEPARTMENT  
FOR  
INFORMATION



(Continued from Page 274)

loan shall be repaid in line with conditions to be established by the Board of Trustees of the Michigan Foundation for Medical & Health Education, Inc."

The following committees were set up: the Qualifications Committee is composed of Doctors Louis J. Hirschman, J. S. DeTar, C. R. Keyport and E. I. Carr; Advisors to the Qualifications Committee are the Deans of the two medical schools, the President and the Chairman of the Rural Health Committee MSMS and any others who may be designated.

This project was launched at a breakfast given by the Foundation at the Book-Cadillac Hotel in Detroit on March 11, 1948. Invited to attend were newspapermen, radio men, businessmen, representatives of rural organizations and doctors of medicine who are particularly interested in the cause. Your President outlined the plan and presented Dr. Louis J. Hirschman, who was the keynoter. We are greatly indebted to Doctor Hirschman for a job well done which gave inspiration and stimulation for this project.

Immediate publicity followed and the medical schools were reached with descriptive notices so that every last medical student in Michigan had an opportunity to know the details of this plan. When no inquiries were forthcoming, your President sent a personalized letter to the director of every accredited hospital in Michigan appraising each of this plan to encourage young doctors to locate in rural areas. There were responses from seven hospital directors commending this project but they all regretted that they knew of no candidate. From all of these efforts, only eight young men have made inquiries, one of whom requested "pull" and not money to get him into medical school. The attitude of each of these inquirers seemed more from a buyer than from an applicant and none followed up our prompt responses describing the plan.

The trend towards specialization and away from general practice is a threat to the private practice of medicine. In some way, a fear has developed among young men in medicine that, without specialization, privileges of practice will be limited. Our experience indicates that financial aid in education is not the sole remedy to secure young graduates to practice in rural areas.

Another approach has already been launched. Approval has been obtained to incorporate dis-

cussion of the privileges and attractive features for the general practitioner in smaller towns and rural areas in the lectures given on economics in the medical schools. In this way, upperclass medical students will be approached on the features of general practice, the backbone of American Medicine.

Our Foundation and our revolving fund plan have attracted the interest of other states and we have been called upon several times to describe our setup.

In October, the Board accepted with regret the resignation of Trustee E. H. Fletcher, necessitated by his moving his residence to California. We are pleased to announce the election and acceptance to the Board of Mr. Stewart Baxter, Trust Officer of the National Bank of Detroit, to fill the unexpired term as a Trustee of this organization.

The philosophy and purpose of this corporation have implied tax exemption, and all gifts to the Foundation have been items for deduction by donors. The Treasury Department frequently withholds rulings, but we are able to report that we are now in possession of a definite ruling from Washington which gives this Foundation tax exemption and a right to definitely advise all donors that their gifts to the Foundation are ruled deductible on their income tax returns.

The final check from the estates of Dr. and Mrs. Andrew P. Biddle has been issued and will be given in the financial report.

The Foundation issue of THE JOURNAL MSMS will be forthcoming shortly.

It would seem that the greatest accomplishment of influence that this Foundation has yet presented has resulted from its attention to distribution of medical care and, in particular, to its planning for improved rural medical care and opportunities in general practice. With many others, your President believes that the evidence does not show a shortage of doctors for Michigan or for the nation but, on the contrary, a lack of reasonable and fair distribution of doctors. A great opportunity for service lies in our continued effort for a fair distribution of medical care together with the continuation and expansion of the several causes to which we are committed.

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# Cancer Comment

## FOURTH GASTRIC CANCER CONFERENCE HIGHLIGHTS

Some highlights of the Fourth Gastric Cancer Conference sponsored by the National Cancer Institute and held in San Francisco, December 13 and 14, 1948, are of general interest.

Work is continuing on the production of gastric carcinoma in mice by the injection of methylcholanthrene into the stomach wall. By this means, at least in animals, it is possible to gain some information on the growth properties of gastric carcinoma. Another series of experiments has shown that shortly after cutting the recurrent nerve in large tropical cockroaches gastric carcinomas develop in the operated roaches. Apparently this is the first time that gastric carcinoma has been produced by altering the nerve supply to the organ affected.

The role of the mucous cell in the production of gastric cancer is being studied since it appears to be the mucous cell that goes on to the formation of the tumor. Influence of endocrine factors was emphasized by castrations in both male and female mice at various stages in the life of the animal. Castration had influenced development of gastric cancer by several times in the castrated animal versus the non-castrated and the incidence was greater in males than in females.

Of much clinical interest was a study conducted at the University of Minnesota on various "precursor" groups of patients fifty years of age and older. In 1,486 individuals found to have achlorhydria by the histamine test, gastrointestinal x-rays showed cancer in seven and polyps in 27. In 92 individuals with pernicious anemia, there were detected four polyps and three carcinomas. Seventy-five relatives of known gastric cancer patients failed on examination to show either cancer or polyp. This method of study was 20 per cent more efficient in detecting gastric carcinoma than other methods of gastrointestinal x-rays of symptomless individuals. Eight per cent of eighty-five gastric polyps proved to be malignant on histological examination.

The detection clinic for gastric cancer at the University of Minnesota calls for the following studies in addition to a history and a physical examination: gastric analysis, photofluorogram of

the chest, proctoscopic and gynecological examination, blood count, urinalysis, stool specimen and, in selected cases, gastrointestinal x-rays. It is only by careful studies such as these that the value of various types of cancer detection methods eventually will be decided.

In 2,500 examinations at Johns Hopkins Hospital, using the Schmidt Camera for taking photofluorograms of the stomach, thirteen gastric carcinomas were found. This method does not require the patient to come to the hospital fasting nor does it necessitate disrobing before having the photofluorogram. Of the survey methods proposed so far, this seems to be the one with most promise.

The cytological examination of fasting gastric contents of over 500 individuals was reported from the University of Michigan. Carcinoma cells were found in approximately 45 per cent of patients known to have gastric cancer. Where there was evidence of cancer without histological proof, the cytological examination revealed cancer cells in one-third of cases. By examining the fasting gastric residuum there was a definite increase of positive examinations where repeat aspirations were performed. Another technique now being used is that of blocking the cells in paraffin and examining as other histological examinations are done, but the efficiency of this procedure has not been evaluated. Whether this procedure can ever be used on a survey basis is somewhat doubtful, although it seems to be a definite contribution to the diagnosis of gastric cancer. It was emphasized that this method should not be utilized as the sole means of establishing the diagnosis of gastric carcinoma.

There is evidence that acid phosphates in gastric juice may be elevated in some patients with gastric carcinoma. Another valuable observation is that many patients with gastric cancer have a positive Kepler Water test.

With improvement in surgical technique, the mortality in total gastrectomy has been greatly reduced and if a higher incidence of cure is expected, more radical surgery, meaning more total gastrectomies, must be done.

An effort is still being made to correlate the possible association of atrophic gastritis in cancer

*(Continued on Page 290)*

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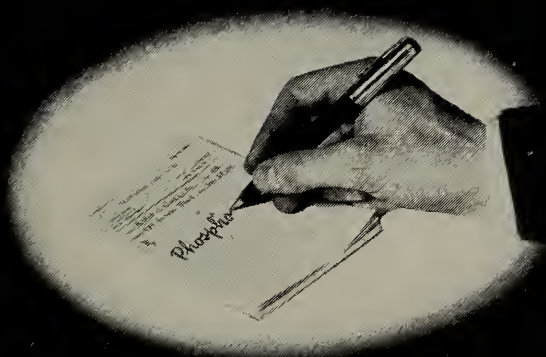
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# Michigan Medical Service

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## MICHIGAN MEDICAL SERVICE— MICHIGAN'S BLUE SHIELD

With this month marking the centennial of the Wayne County Medical Society, there is probably no organization from whom congratulatory messages are of more significance than the good wishes of the Michigan Medical Service. March is also the anniversary month of this organization, which is the doctors' own non-profit, voluntary program of surgical-medical care in Michigan, and the Wayne County Medical Society was a determining factor in the establishment of the program.

Now recognized throughout the world as one of the nation's leading Blue Shield Plans, Michigan Medical Service began only nine years ago, in March, 1940. For approximately ten years prior to its establishment, members of the Michigan State Medical Society, the Wayne County Medical Society and other county medical societies in the state had made an intensive study of prepayment, medical care plans. The studies included an examination of the British Panel System by representatives sent to England for the purpose. After the investigations and studies had been completed, it was necessary to secure enabling legislation. This legislation was passed during 1939 and Michigan Medical Service began operation on March 1, 1940.

Since then—from March, 1940, to January 1, 1949—Michigan Medical Service has paid \$32,426,011.21 for services to the public rendered by the doctors. Of this amount, \$7,125,912.24 was paid in 1948 alone. From inception to January 1, 1949, 576,574 surgical cases (excluding those under the Veterans program) were handled by Michigan Medical Service. In 1948 these cases totaled 106,383.

The year of 1948 marked the enrollment of the millionth subscriber to Michigan Medical Service, and at the year's end, the organization had a total of 1,311,811 persons enrolled in its plan.

One of the Blue Shield Plans of the nation, Michigan Medical Service, for practical purposes, is known as one of the Michigan's Blue Cross Plans. Its companion organization for hospital care is Michigan Hospital Service, a Blue Cross Plan, which also celebrates a March anniversary.

Organized ten years ago, Michigan Hospital Service enrolled its first subscriber on March 17, 1939, and on January 1, 1949, had an enrollment of 1,537,632 members.

During its ten-year period from March, 1939, to January 1, 1949, Michigan Hospital Service paid \$62,486,685.85 to hospitals for services rendered Blue Cross subscribers. Of this amount, \$14,842,453.83 was paid in 1948 alone.

From inception to January 1, 1949, 7,997,741 days of hospital care were provided by Michigan Hospital Service. In 1948 alone, these days of care reached the total of 1,189,561.

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## FREE MEDICAL SERVICE

*(Continued from Page 272)*

—army, navy, and air—to investigate the feasibility of arranging for the care of the dependents of their personnel through the medium of voluntary service plans, similar to the "home town medical care program" we now have in force with the veterans, which was initiated by Michigan Medical and Hospital Services. This solution of a vexing problem, which will soon become acute, is so eminently proper and feasible that we are surprised it has not been started.

The recent ruling, relieving the military officials of this burden, makes this an acute problem which the administration of the military forces cannot brush off, without offering some relief. If the families of the men in the service cannot be cared for medically, the securing of recruits for the military service may be increasingly difficult. The question of service connection does not enter; therefore, the solution can be reached even more easily than in the case of the veterans burden. The precedent has been established, and the know-how has been worked out for three years.

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People earning above \$6,000 a year make up only 4.23 per cent of the Federal income tax payers. But they pay 51.27 per cent of total income taxes, the Treasury Department reports.

Only 2,227,013 out of the 52,600,470 persons filing Federal income tax returns in 1946 were listed as having income above \$6,000.

Only ninety-four persons—fewer than one in 500,000—reported incomes over \$1,000,000 and just ten of them took in over \$3,000,000.

Almost half the people making returns showed income under \$1,750 a year.



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# You and Your Business

## HOME TOWN MEDICAL CARE FOR VETERANS

EDITOR'S NOTE: By request we are publishing an article by Paul F. Magnuson, M.D., which was published last year in *The Journal of the American Medical Association*. This is republished because the Veterans Administration officials wish to correct the misunderstanding on this subject which is apparent in Michigan.

The Editor asked clarification from Arthur J. Klippen, M.D., Chief of Professional Service, Medical Division in the Michigan area, and we are quoting Dr. Klippen's replies in addition to Dr. Magnuson's letter.

In brief, the "home town care" of veterans, medical and hospital, is available for all service-connected disabilities. If a veteran has been a bona-fide patient of the doctor in charge, the patient will not be taken away from the doctor if notification is made on the report that he is a regular patient of the doctor, not a new patient for this particular service. In the case of non-service-connected disabilities, veterans can only be taken care of by the Veterans Administration when they are bed patients or out patients in a Veterans facility, and sign a statement that they are unable to pay reasonable fees. These patients are not eligible for "home town care" and can be taken by the Administration only if there are available beds, according to the law. However, we know that from 70 to 80 per cent of the Veterans Administration patients are now in this category.

Dr. Magnuson's letter and Dr. Klippen's comments follow.

Dr. Paul B. Magnuson, chief medical director, Veterans Administration, writes:

"It has come to my attention that considerable misunderstanding has developed throughout the medical profession concerning the establishment of fees for medical services to be paid private physicians participating in the so-called 'Home Town Medical Care Program for Veterans.' It has been contended that the Veterans Administration has arbitrarily established a fee schedule which represents the maximum amount which may be paid for any given service and which is, in effect, a nation fee schedule. It has also been contended that the various state medical societies and other interested groups were not consulted when this fee schedule was adopted.

"In order to clear up any misunderstanding regarding this matter, it is desired to emphasize that my predecessor, Dr. Paul R. Hawley, had no intention at any time of establishing a national schedule of fees, nor do I contemplate doing so. However, the fee schedules originally submitted by the various state medical societies, when the 'Home Town Medical Care Program' was inaugurated, varied so widely in format, terminology and fees for similar or identical services that it was deemed advisable to establish a uniform fee schedule format and to set up tentative fees which could be used as a guide by the various state medical societies when submitting their proposals for the furnishing of medical care to veterans.

"This uniform fee schedule format was formulated by the Professional Group of National Consultants to the Chief Medical Director. This group, representing the various specialties in medicine and surgery, is composed

of eminent physicians from all parts of the country. Tentative fees were set up in the format after a careful analysis of prepaid medical care plan workmen's compensation and insurance fee schedules, and also the fee schedules in effect in the various states having agreements with the Veterans Administration. As was to be expected, considerable variation occurred in the fee schedules reviewed.

"The Professional Group of National Consultants made every effort to arrive at fees that were considered to be within reasonable limits and which would, as nearly as possible, allow a uniform provisional fee schedule for use as a guide in facilitating and expediting the preparation of agreements between state medical societies and the Veterans Administration.

"Further attempt was made to provide for elasticity in the charges for certain operations or other services which seemed to evoke more than average contention by listing the minimum and maximum amounts considered equitable. These items bear the notation AA, which indicates that the fee for the given service is to be determined by arbitration and agreement between the Veterans Administration and the medical society concerned.

"May I reiterate that the Veterans Administration Fee Schedule Format is in no sense to be construed as an arbitrary or national fee schedule. Furthermore, it is subject to periodic review and such modification as conditions may indicate."

\* \* \*

Veterans Administration  
Guardian Building  
Detroit 32, Michigan  
January 28, 1949

Dear Doctor Haughey:

Submitted herewith are answers to your questions, which we discussed at our meeting at the Michigan Medical Service Building on January 20, and which you desired for publication in the *MICHIGAN MEDICAL JOURNAL* along with Dr. Magnuson's and Dr. Hawley's letter explaining home-town medical care.

The first question which arose was as follows:

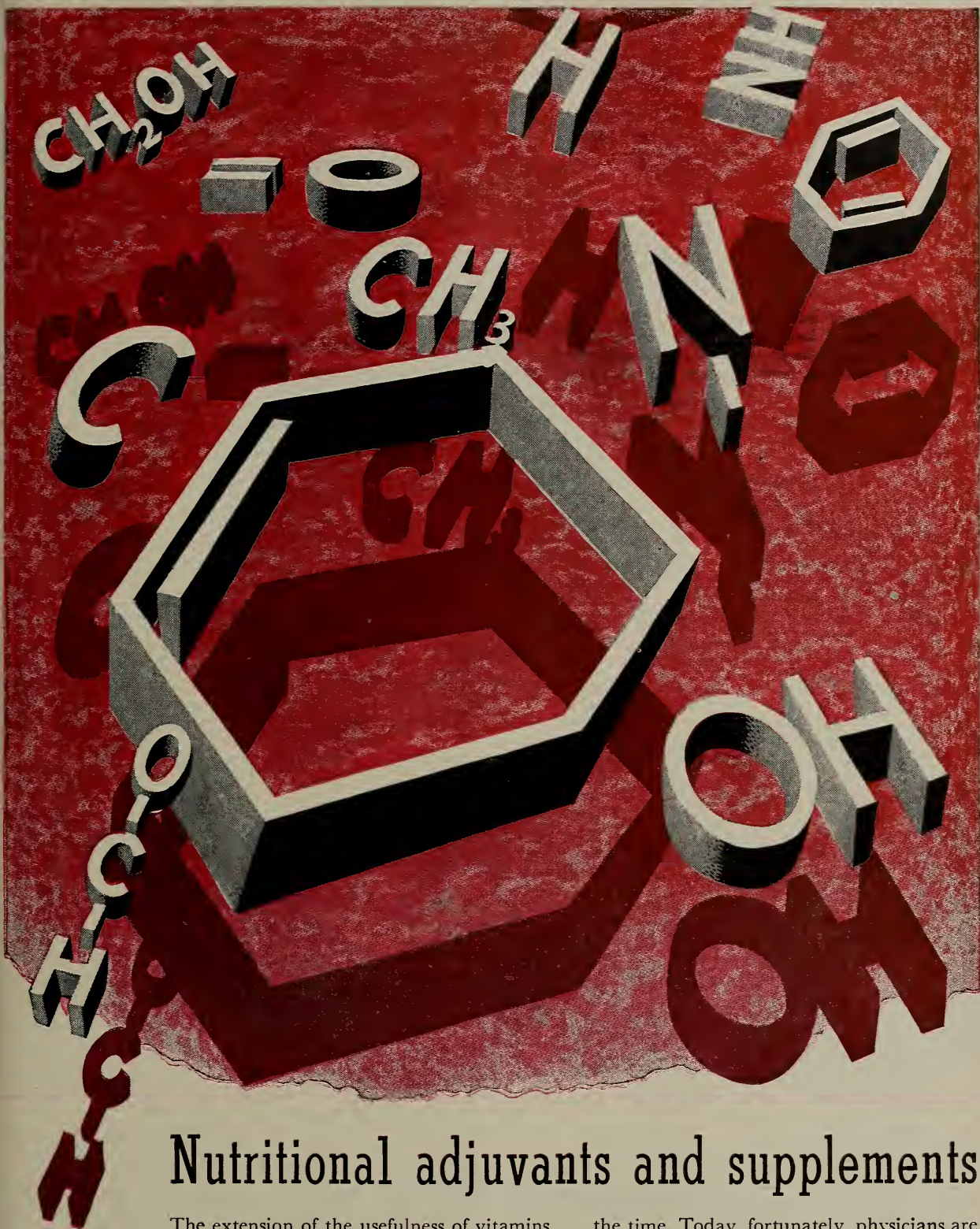
"Very often the Veterans Administration has asked for information from doctors relative to Veterans Administration patients. Sometimes these patients have been under the care of private physicians, and in many cases they had not previously seen this particular doctor. This placed the burden of furnishing medical information to the Veterans Administration either on the veteran who may or may not be service connected for the condition for which he is requesting hospitalization or else will fall upon the good will of the physician." This complaint was answered as follows: "Whenever information relative to the need for hospitalization was asked for by the Veterans Administration, authorization would be prepared by the Regional Office with the code of No. 0011 which means 'examination to determine need for hospitalization' and a fee of \$3.00 would be paid. This fee would be paid on all cases whether service connected or not as long as it could be proven that the man was a veteran with an honorable discharge."

Another complaint which was registered was as follows:

"Many doctors had Veterans Administration patients under their care for variable periods of time and when the need of hospitalization arose they were almost always taken out of the doctor's care and placed in Government institutions such as Percy Jones or Dearborn. This

(Continued on Page 284)





## Nutritional adjuvants and supplements

The extension of the usefulness of vitamins, beyond the specific deficiencies which they cure and prevent, is a therapeutic phenomenon of the past decade. Those who specialize in nutritional disease have frequently emphasized to physicians the doctrine that every cell in the body needs every vitamin all of

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## VETERANS ADMINISTRATION

(Continued from Page 282)

complaint was answered as follows: "It is not our desire to interfere with doctor-patient relationships if they have existed for a considerable period of time. But as an economy measure, obviously, it is not good judgment to have empty beds in Government facilities which have to be paid for, full or empty, and at the same time rent a contract bed in addition, thus making the taxpayer pay for two beds for the same veteran at the same time. If no beds are vacant, however, in Government institutions it is our desire that the family physician be allowed to carry on the hospital treatment in a contract hospital if necessary."

It is further stated that where doctor-patient relationships have been of long standing that every effort would be made to maintain those doctor-patient relationships and allow contract hospitalization on emergency cases under the care of private physicians. This is not a new policy of the Veterans Administration but merely a clarification to the doctors of the State of an existing policy. Every effort will be made to see that this policy is followed.

There has obviously been some misunderstanding about service-connected and non-service-connected cases which can again be explained and which may bear repetition to the doctors of the State. Service-connected cases are those in which veterans receive disabilities during the war and file a claim for such disabilities and, and this following statement is very important—the Government has recognized these disabilities as having been war-incurred. This latter type of veteran is the only one who may receive home-town medical care at the expense of the Veterans Administration and/or contract hospitalization, and this only when the Veterans Administration has been notified and given consent prior to such care or hospitalization. The other group of non-service connected cases, that is, veterans who have incurred disabilities not the result of war service, are not eligible to home-town medical care by the Veterans Administration, but they are eligible to hospitalization in a Government facility if a bed is available and they sign that they have no funds to care for their own illness. The only payment which can be made to the doctors on this type of case is the \$3.00 doctor's fee for filling out the physical examination on the Form P-10 for hospitalization when requested to do so by the Veterans Administration.

The above is the information which I gave to you at our meeting on January 20. I hope that it adequately covers all the questions the doctors have been asking you. It is sent with the concurrence of Mr. Guy Palmer, Regional Manager of the Veterans Administration in Detroit.

Sincerely yours,

ARTHUR J. KLIPPEN, M.D.  
Chief, Professional Services  
Medical Division.

## EMERGENCY TELEPHONE SERVICE

The Genesee County Medical Society has developed a splendid emergency medical telephone service. To secure doctors in an emergency the Medical Society telephone has been bridged to a professional answering service, twenty-four hours a day, seven days a week. The County Medical Society had asked doctors to volunteer for emergency house calls. The names of these volunteers were given to the Professional Answering Service, after which this new program was publicized through a feature story in the *Flint*

*Journal*. The unlisted telephone number was given to all hospitals, fire and police departments, social agencies, and to the members of the Genesee County Medical Society. After a trial period to determine the volume, the telephone number was made available to the public.

The program works as follows: when a doctor, otherwise busy, is called he merely tells the prospective patient to phone the Medical Society number and another doctor will be sent.

After nine months of operation, the Genesee County Medical Society no longer hears complaints of families unable to find a doctor in Flint and Genesee County.

The calls have averaged over forty-five a month (412 calls in nine months). Only thirty-nine of these were daytime calls handled by the County Medical Society secretary. Only seventy-four were from persons who said they had no family doctor. Sixty-one calls were for pediatric emergencies.

The Genesee County Medical Society's Public Relations Committee reports: "The public, the answering service, the doctors, and especially the volunteers, have remained co-operative. They all have realized this plan is an effort to solve a problem. We feel that the problem is solved in this county."

Our congratulations, Genesee County Medical Society, on this pioneering and most effective work.

## INTERNATIONAL CONGRESS ON RHEUMATIC DISEASES

More than 150 physicians from foreign countries are expected at the International Congress on Rheumatic Diseases to be held at the Waldorf Astoria in New York City from May 30 to June 3, 1949. Many of these physicians will present papers before the plenary sessions which will be held in the mornings. In the afternoons clinics will be held at several of the New York hospitals.

Among papers already accepted are:

- "Rheumatism, a National Problem," Lord Horder of London.
- "The Treatment of Progressive Rheumatism with Copper Salts," Jacques Forestier, Aix-les-Bains, France.
- "Relations between Rheumatic Fever and Rheumatoid Arthritis," Eric Jonsson of Stockholm.
- "Transfusions of Blood from Pregnant Women in Patients with Rheumatoid Arthritis," Imre Barsi-Basch of Budapest.
- "Procaine Infiltration in Painful Musculoskeletal Disorders," Professor S. de Seze of Paris.
- "Statistical Analysis of 1,000 Cases of Rheumatoid Arthritis in Relation to Insidious and Acute Onset, Menopause, Pregnancy, Psoriasis, Ankylosing Spondylitis, and Still's Disease," Svend Clemmesen, Copenhagen.
- "Some Aspects of Psychogenic Rheumatism," Dr. William Tegner of London.
- "Muscle Soreness and Myositis as a Symptom of Chronic Overstraining, Especially in Neurotics," Henrik Seyfarth of Oslo.
- "Chronic Polyarthritis and Psoriasis," P. Barcelo of Barcelona, Spain.
- "Involvement of the Nervous System in Rheumatoid Arthritis," Veikko Laine of Heinolan, Finland.
- "Periarthritis of the Shoulder," Fernando H. Ramos of Montevideo.

The meeting is open, and the registration fee is \$10.00.



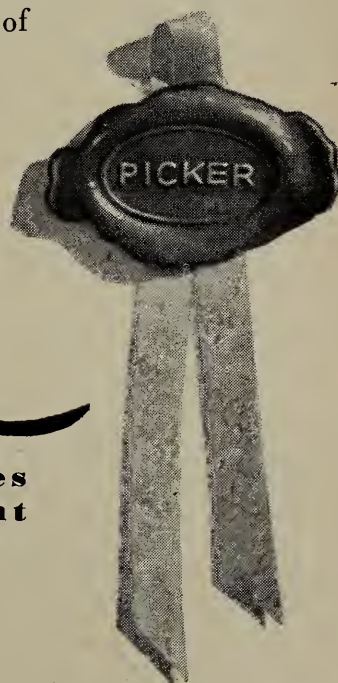
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# Socialized Medicine

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## SOCIAL MEDICINE SURE ROAD TO BANKRUPTCY

### French System Cited as Warning

Socialized medicine under the guise of compulsory health insurance advocated by President Truman offers the one sure road leading to bankruptcy of the United States, Dr. Melchior Palyi, internationally known Chicago economist, warned last night. He spoke on "Government Medicine in Europe" at the annual midyear conference dinner in the Drake hotel of presidents and secretaries of 50 American and Canadian hospital groups.

Palyi, 56, who was born in Hungary and is now a citizen of the United States, is a consultant to banks and industries. Prior to Hitler's rise, he was chief economist for the Deutschebank in Berlin and chief economic adviser to the Reichsbank of Germany.

### Parallel Is Drawn

At the meeting, sponsored by the American Hospital association and attended by 150 delegates, Palyi drew a parallel between the socialized medical system of France and the threatened rise of a similar program under New Deal auspices in this country.

"Financially, France is bankrupt internally and also externally," Palyi said. "She is headed toward monetary chaos and political as well as moral chaos, to a large degree because of her social security system, and the most dangerous item in that social security system is socialized medicine."

The French, he recalled, did not have socialized medicine until World War I, when they took over Alsace and adopted the social security system that had been introduced there by Bismarck.

Bismarck, Palyi said, didn't care much about medical care, or whether the people got it. Political control of the medical system meant two things to the German chancellor.

### Government Gets Money

"In the first place," Palyi said, "Bismarck expected to raise money to provide the care—people pay now and get the benefits later. That is one idea behind all social insurance. It puts funds in the hands of the government."

"Bismarck needed money constantly for military purposes and time and again had trouble with his parliament for not voting enough money. Little extra funds that could be invested in government bonds were a handy thing to have around."

Because the French found the German system full of corruption, they decided to correct it and produced their own program, Palyi said.

Bismarck, he said, wanted to get control of the workers by offering them so-called social services. But the French devised a system under which patients chose their own doctors and paid the physicians their regular fees.

After the doctor presents his bill, the Frenchman sends the statement to the government for reimbursement.

### It Sounds Fine

"Now that sounds fine," Palyi said. "All the patient has to do is have the government reimburse him for his medical expenses. Naturally, that cannot be done because the expenses would be much too high if the government tried to reimburse all the patients."

"Therefore a partial reimbursement was decided upon. It amounts to from 40 to 80 per cent of the doctor's bill, depending on what kind of service is rendered. French doctors told me that 60 per cent is a fair average of the amount that is supposed to be reimbursed."

"But here again is how the system works: Somebody has to check on the doctor to avoid corruption. Otherwise collusion might occur at the government's expense. The doctor might make out a big bill and have the patient send it in and collect the money, to be shared between them."

"A method had to be evolved for checking every doctor's bill. But what about a doctor working in collusion with another doctor? So another method had to be developed to check on the doctors who check on the doctors."

### Long Wait For Money

The French system works out so well, Palyi said, "that the patient scarcely ever gets his money back." On the average, he related, a Frenchman has to wait six to nine months and go through an ordeal of red tape and litigation while the physicians and supervising government agencies are feuding.

"The worst thing, perhaps, about the French compulsory health insurance is the same as that of its German counterpart," Palyi said. "It produces a huge deficit. Much of the surplus accruing in the old age pension fund supposed to serve in supporting the government bond market is dissipated for the deficit in the health insurance fund."

Palyi said patients choose their doctors on the basis of the physician's "co-operation" in deceiving the government to give the patient sick leave with pay at the taxpayer's expense.

### Costs Are Higher

The community has to pay higher administration costs for controlling both the doctor and the patient, Palyi said.

"This results in an extremely complex administrative setup," he asserted. "The controllers, too, must be controlled, and so the politicians manage to create jobs for every brother-in-law they can muster."

Under socialized medicine, Palyi said, the less the insured is bothered by his conscience, the more he will get out of it. This is an invitation to dishonesty and an incentive for absenteeism in industry, he warned.—ROY GIBBONS in *Chicago Tribune*, Feb. 5, 1949.



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# Editorial Comment

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## STATE MEDICINE HASN'T WORKED ANY MIRACLES

In a recent "Meet the Press" program, Lawrence Spivak quoted Oscar Ewing, head of the Federal Security Administration, as having said this: "Which is more important? The personal, selfish business and professional values of 180,000 practicing physicians in this country, or the health and well-being of some 68,000,000 of our population?"

Administrator Ewing might better have asked, "Which is more important: the opinions and professional standards of 180,000 doctors who have been trained to practice medicine and who have raised American medical care to a level achieved nowhere else, or the supposed notions of some millions of laymen that if medicine became a Federal bureaucracy, better medical care would follow immediately?" Mr. Ewing implies that the objections of the doctors to socialized medicine are purely selfish and that better health would result from the bureaucratic scheme now contemplated.

None of these contentions is impressive, but that does not mean we shall not get socialized medicine. Indeed, the bloc of professional social workers, whose benefits from such a scheme are obvious, has sold the idea to millions. Already the private physician has been successfully smeared to the satisfaction of millions as a profiteer whose interest in medicine is that it pays better than selling vacuum cleaners.

However, it might not be a bad idea to take up at least a few of the extravagant claims made for public medicine. Dr. Melchior Palyi, economist at the University of Chicago, spent last summer in Europe studying the effects of "planning" in various fields. Medicine interested him particularly because its socialization gets defenders who would not favor the socialization of anything else. He found there are two ways to socialize medicine: the Bismarck method, which was to make public functionaries of doctors; and the French method, which was to leave the practice of medicine alone, but send the patient's bill to the state. (This latter appears to be the way Mr. Ewing wants it.)

The corruption in the Bismarck system resulted in such backbreaking costs and such bad medicine that the Germans had to change it. The French scheme works out about as badly. The patient sends his bill to the government, but the kickbacks became so scandalous that a huge army of functionaries has arisen to check the doctors' bills. Inevitably the deficit of the health-insurance program mounts steadily and has to be replenished from other revenues. Inevitably also, the state, to postpone bankruptcy, must interfere more and more with medical practice.

Britain, which has taken a modified form of the German system, has already run into the pattern of rapidly rising costs. Doctors' waiting rooms are packed as, according to Doctor Palyi, human nature asserts itself,

"diluted by utopian ideas of the individual's alleged right to costless service provided by the state, which is presumed to have unlimited resources." The catch in socialized medicine is, of course, that the insured can always take out more than he pays in. Unfortunately the decline of medical standards, which always accompanies the encroachments of bureaucrats into professional matters, means that the medical care which can be guaranteed becomes less worth getting.

It seems to us that Congress, instead of swallowing whole hog what the social-worker bloc and the CIO-PAC and louder irresponsibles in politics think about the practice of medicine, might consult the doctors. They might at least enlighten us on just how 180,000 medical men are going to do the work of the 500,000 medical men who will be needed when pills and poultices are free, merely by taking their orders from social workers and Federal jobholders.—Editorial, *The Saturday Evening Post*, Jan. 22, 1949.—Reprinted by special permission.

## ANOTHER FEDERAL FAILURE

It is simply impossible for any single federal agency to direct the multiple and diverse social and economic activities of a country as complex and huge as our own. This fact is being proved every day by the Hoover Commission now investigating the activities of the executive branch of the government.

In its report on the medical programs of the Federal government the commission has again revealed the overlapping and confusion, the extravagance and waste of such a comprehensive Federal program. More than 44 Federal agencies are now spending \$1,250,000,000 a year for different sorts of medical care. Much of this huge sum is unnecessary and goes down a rat hole:

New projects have been initiated, says the report, "without any understanding of their ultimate cost, the lack of professional manpower to carry them out, or their adverse effect upon the hospital system of the country." Thousands of unqualified civilians are getting medical care from military facilities through the interpretation of an old law written 60 years ago. Huge new hospitals are being built within a few miles of other Federal hospitals that are almost empty. The supposedly unified Army and Navy are competing with each other to build hospitals when "there is no evidence that additional beds are needed."

It would take several years to reorganize this wasteful duplication of our already existing Federal medical programs. Yet the Truman administration is still intending to pile on top of this rickety mishmash a compulsory Federal medical insurance program which would add billions to the taxes paid by the people without adding any new doctors or hospitals to take care of them.

The attempts of the New Deal to solve everybody's

(Continued on Page 290)

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\*\*Reprints on request:

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60;  
Proc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.





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## ANOTHER FEDERAL FAILURE

(Continued from Page 288)

problems in Washington is certainly proving the rightness of the founders of the American republic. They saw the necessity of local solutions to local problems. They also saw the dangers in centralizing control over social and economic activities which are so diversified that no single agency can properly administer them. They wrote into the Constitution that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states, respectively, or to the people." They knew that no government of human beings was capable of playing God to the people of a nation as large and as diverse as America. The failure of our Federal health services as exposed by the Hoover Commission is just another proof of the sagacity of our founding fathers.—Editorial, *The Indianapolis Star*, Dec. 28, 1948, reprinted in *Journal, Indiana State Medical Association*, February, 1949.

## BLUE SHIELD PLANS EXCEED TEN MILLION MEMBERS IN 1948

With a fourth quarter gain of 1,057,274 members, the largest quarterly growth in the history of the prepayment medical care movement, Blue Shield national headquarters announced recently that 1948 enrollment had totaled 10,370,819 persons. The million-member gain represented a growth of 11.35 per cent for the fourth quarter of 1948.

Contributing to this phenomenal growth was the enrollment of Ford Motor Company employees, totaling approximately 250,000 persons, the majority of which were enrolled in Michigan Medical Service.

Blue Shield in Michigan continues to be the largest Plan in the nation with a December 31st enrollment of 1,311,811, followed closely by Blue Shield in New York City with 1,128,967 persons enrolled.

Delaware still leads all other Plans in the percentage of population protected, having enrolled approximately 49 per cent of the state's population. Michigan follows with 21 per cent of the population enrolled.

## FOURTH GASTRIC CANCER CONFERENCE HIGHLIGHTS

(Continued from Page 278)

bearing stomachs, It is probably not the gastritis but the effort at regeneration which, when it gets out of control, causes the neoplasm.

The association of diminishing hydrochloric acid in patients who eventually develop gastric cancer was again emphasized. A person who develops carcinoma at the age of fifty probably has a reduced free hydrochloric acid below the average at the age of thirty. A similar situation exists in precursor lesions of gastric cancer such as gastric polyps.

These and other reports emphasize the fact that strides are being made in improving our knowledge of the etiology, as well as management of, gastric carcinoma. It should be a hopeful sign to all that so much interest is being shown in this subject.

# The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 48

MARCH, 1949

NUMBER 3

## Historical Sketch of the Wayne County Medical Society

THE WAYNE COUNTY Medical Society as now constituted is a branch of The Michigan State Medical Society and the product of an evolution beginning in 1819-20 with the organization in Detroit of the Michigan Medical Society (August 10, 1819), and the Territorial Medical Society (January 11, 1820). The first local society was formed in 1846 with the organization of "The Sydenham Society," of which Dr. Charles N. Ege was President. After a few years, this Society disbanded and on April 14, 1849, was formed the first "Wayne County Medical Society." Disbanded in 1851 by the repeal of the laws under which it existed, it was followed by the Detroit Medical Society, May, 1853, whose first president was Dr. Morse Stewart. After an active career of about five years, it disbanded in March, 1858. From this date until 1866 there was no local medical society in this county. On May 31, 1866, there was formed the second Wayne County Medical Society. Its first president was Dr. Zina Pitcher; Vice Presidents, Drs. G. S. Armour and E. P. Christian; Secretary, Dr. H. F. Lyster; Treasurer, Dr. L. H. Cobb; meetings held quarterly. Early in 1876 it adjourned, *sine die*.

On August 21, 1876, the third Wayne County Medical Society, having been organized under the presidency of Dr. William Brodie, was incorporated under the laws of the State of Michigan.

Having amended its Constitution and By-Laws to conform with those of the State Society, it applied for and received a charter as a branch of

that body on August 15, 1902, under the presidency of Dr. Samuel Bell.

At this time there combined with it that branch of the profession which separated from it in 1876 and conducted successful operations as the Detroit Medical and Library Association. Besides, it received the hearty support of the several medical clubs of the city. In fact, the members of the latter were most active in promoting the unification of the profession of the County as a branch of the State Society. Into it went the training of the Detroit Obstetrical and Gynecological Society (1884-1897) and The Michigan Surgical and Pathological Society (1891-1899). Since the territorial and state societies served all the purposes of a county society in Wayne, the present organization may fairly be said to have begun in 1819, and with slight interruptions continued its evolution to the present, a period of 139 years.

On December 3, 1906, the Constitution was amended so as to make the Defense League, which was previously composed of only a part of the members of the Society, an integral part of the Society.

The Defense League, in connection with the Wayne County Medical Society, was a success from the beginning and met with such favor that the members of the Michigan State Medical Society, by action taken January 1, 1910, took over the Defense League of the local society and made it a part of the framework of the Michigan State Medical Society. Its functions were reduced to an advisory status in 1940.

In the year 1902-1903 the first "Wayne County Medical Bulletin" was published. Then for a space of six years the Bulletin ceased to exist. In 1909 the officers could see the necessity of having some means of regular communication with the members of the Society and "The Wayne County Medical Society Bulletin" was published and is



still being published at the present time. The name was changed in 1933 to "The Detroit Medical News."

Early in 1910, under the presidency of Dr. Arthur D. Holmes, sufficient enthusiasm was manifested by the members of The Wayne County Medical Society to encourage the election of a Board of Trustees and to authorize them to purchase a society building. The property at 65 East High Street (now Vernor Highway) was purchased, which was to be paid for by popular subscription among the members. The Society, in order to own property, was incorporated by the Board of Trustees, and on September 1, 1910, the first meeting was held in the new quarters. Owing to the increase of membership to over 400 in 1913, it was plainly evident that larger quarters for a meeting place would be needed soon, so the Trustees were authorized by the members of the Society to proceed with the construction of an auditorium at the rear of the building, to cost not more than \$30,000. This they did, and the first meeting in the new auditorium was held February 2, 1914.

During the presidential administration of Dr. James E. Davis, in 1921-1922, the Beaumont Foundation was established for the purpose of giving instruction in the medical sciences and fostering inspiration toward higher ideals. The funds for carrying on this work were obtained from the surplus contributions then in the hands of the Patriotic Committee of the Society—contributions which had been made for the purpose of aiding needy members at the time of the World War. The Foundation was given the name of William Beaumont in honor of a physician now famous for pioneer research work begun at Mackinac, Michigan, in 1822.

The first of this lecture series was given by Dr. W. G. MacCallum of Johns Hopkins Medical School in January, 1922, and was entitled "Inflammation." All essayists in this annual lectureship have brought to Detroit most significant contributions to the science of medicine.

In 1924, Dr. William E. Blodgett, a member, donated the sum of \$5,000 for the establishment of the Detroit Orthopedic Lectureship Foundation. This fund was to be administered by the Lectureship Foundation Committee and lectures were to be given on subjects relating to orthopedic surgery. The first of these lectures on "The Evolution of Orthopedic Surgery" was delivered by Dr.

Robert B. Osgood of Boston, Massachusetts, in 1925.

Both the Beaumont and Orthopedic Lectureships are now managed by one committee of the society, The Lectureship Foundation Committee.

In co-operation with the Detroit Roentgen Ray and Radium Society a new annual lectureship honoring the pioneer Michigan Roentgenologist, Dr. Preston M. Hickey, was inaugurated in 1937. The first Hickey Lecturer was Dr. A. W. Crane, of Kalamazoo, who spoke on "Some Memorable Antecedents to the Discovery of the X-Ray." This annual lectureship series is an important contribution to the scientific knowledge of the medical profession.

In January, 1927, the Society, having sold the property at 65 East High Street, established new quarters on the eleventh floor of the Maccabees Building, which it occupied for five years, using the auditorium in the building for its weekly meetings.

In January, 1932, the members of the David Whitney family of Detroit very generously turned over to the society their historic old family mansion located at Woodward and Canfield Avenues. This fifty-two room structure was admirably suited to the needs and activities of the society, which began to grow in scope and importance. December 1, 1941, the "David Whitney House" was conveyed by deed to the society.

The effects of the great depression which began in 1930 reached such proportions that more than a quarter of the city's population was on public welfare, and another large segment in need of supplementary aid. With customary social consciousness the members of the profession set about, through their established society, to organize a well-rounded program of medical care for all classes of the populace, regardless of ability to pay.

In 1932, the Medical Aid Office of the Society was established. With the entire membership co-operating, this department acted as a central clearing house referring thousands of unemployed people to private physicians for needed home and office care. When the Federal Government entered the field of medical relief in 1934, the society co-operated in setting up the Medical-Dental Bureau of the Federal Emergency Relief Administration. Housed in Society headquarters, this governmental agency provided home and office care for unemployed on the direct relief rolls,

## WAYNE COUNTY MEDICAL SOCIETY

maintaining the physician-patient relationship. Following the enactment of a new State Welfare Law (effective December 1, 1939), this department was closed by the city administration Febru-

Another department of importance to the public health, "The Cancer Registry," a joint enterprise of the Department of Health and the Society, was organized in 1929 to serve as a central statistical



DAVID WHITNEY HOUSE  
Wayne County Medical Society Headquarters

ary 15, 1940, and all welfare patients advised to secure care from the City Physician's Office. The fundamental principle of free choice of physicians again was established January, 1942, by the enactment of an amendment clarifying the State Welfare Law. In February, 1934, the Society launched its Medical Service Bureau to assist those above the indigency level to meet the costs of catastrophic illness. This was a post-payment plan administered in a separate department at society headquarters, extending credit rather than charity. Its functions, greatly reduced with the better times and with the inauguration in 1940 of the professionally sponsored voluntary non-profit medical service plan (Michigan Medical Service) and group hospitalization (Michigan Hospital Service), were merged in the Detroit Physicians Business Bureau, for those who still needed budgeting assistance. This latter department, organized in 1918, under the official supervision of the Society, has functioned for over 25 years to furnish the members with reliable collection, credit and book-keeping services. Thus during the many years of economic depression following 1929, the Society carried on its active program of medical assistance for all the people of Wayne County.

and follow-up agency on tumor cases. (This Bureau has made 26,834 contacts with patients, physicians, and hospitals).

With the establishment in 1938 of the Woman's Field Army for The Control of Cancer, the Society made space in its headquarters for the Wayne County unit of this worthy organization.

In 1939, due to the close relationship in health affairs of the Medical and Dental Professions, the Detroit District Dental Society was provided with quarters on the second floor of the building for its office and for Board Meetings.

The McGregor Health Foundation has occupied office space in the building since its inception in March, 1935.

The third floor central hall of the building was taken over during 1940, 1941 and 1942 for the Red Cross work of the Woman's Auxiliary of the Wayne County Medical Society. For many years the auxiliary has maintained a continuous program of active public service.

A dining room is maintained for the convenience of members and committees.

The co-ordinating center of all these professional and public activities is the Society's Executive Office, which since 1927, has required the



full time services of an Executive Secretary and several assistants. Through this office the public is served daily with information and advice on a thousand different medical and health subjects. Civilian defense activities, the examination of draftees, Procurement and Assignment Service functions and many other correlated details of the National Emergency were major concerns of the headquarters office beginning in 1939.

During this epoch the Society gained national recognition as a leader in medico-economic affairs, directing much of its energy to the proposition of preserving from outside interference and destruction the finest elements of good medical practice.

The weekly meetings of the Society, following the removal to the Whitney home, have been held in the Lecture Hall of the Detroit Institute of Arts. Through the months of October to May each year they bring outstanding scientific talent to Detroit, stimulating professional advancement among local physicians: symposia featuring Detroit doctors have drawn capacity audiences.

A new intra-society group of interest was formed December 28, 1931, when about 60 members who had enjoyed over half a century in medical practice, met at the instigation of Dr. Henry A. Luce. They called themselves "The Seniors" and met regularly each month thereafter for luncheon, informal discussions, reminiscence and entertainment.

In 1932, an educational movement began through the organization of the Noon Day Study Club. This group composed of Society members under forty years of age centered its activities around a weekly luncheon meeting in the Society headquarters at which a scientific paper was presented by one of the members of the Club. This step in the direction of self-education among the younger men was enthusiastically received and grew to be a source of pride among the general membership. It has developed many officers for the activities of the parent society.

The latest activity in postgraduate medical education is the "Continuation School of Wayne County" sponsored by the Society in co-operation with the Wayne University College of Medicine, the hospitals in Wayne County and the Detroit Department of Health. This school offers bedside teaching for private practitioners in many practical fields and it enrolled over 200 members in its first term in the Fall of 1939.

The Detroit Plan of Medical Participation, now a national and even international model in the public health field, was launched and developed in 1927, through the joint efforts of the Detroit Department of Health and the Wayne County Medical Society. This co-operative effort has helped carry Detroit to first health position among the large cities of the world.

The roster of members published in the summer of 1942 showed the Society with a membership strength of 2,592. As of November 1, 1942, 750 Doctors of Medicine were in active military service from Wayne County. This included the medical personnel of the 17th General Hospital (Harper Hospital) and the 36th General Hospital (Wayne University College of Medicine), both of which saw extensive overseas service and were awarded commendations for their activities. Several reserve units are in process of organization now.

The movement for recognition of the general practitioner not only originated in Wayne County but it was through the efforts of the Detroit doctors that national recognition was secured and the American Academy of General Practice established.

The first hospital to establish a General Practice Section was Mt. Carmel in 1939. A year later the Wayne County Medical Society set up a General Practice Section. In the following year upon the recommendation of the Wayne Delegates a General Practice Section was included in the State Society. In each of the next five years the Delegates from the Michigan State Medical Society called on the American Medical Association House of Delegates to establish a General Practice Section. In 1946, after a direct mail appeal to all county secretaries and other physicians throughout the country by the General Practice Section of the Wayne County Medical Society, approval was given to the organization of a General Practice Section in the American Medical Association, and in 1947 the Academy of General Practice of Wayne County was organized.

The guiding principle underlying the group efforts of the medical profession in Wayne County is that patients must receive the best type of medical care, and that the interests of the community and of the taxpayers are best served, by maintaining the close and confidential relationship between doctor and patient through medical care in the offices of private practitioners on a self-respecting and self-sustaining basis.

# Vagotomy

## Follow-up Report on Fifty-three Cases

By Duncan A. Cameron, M.D., Charles W. Burt, M.D., and William M. Tuttle, M.D.

Detroit, Michigan

SINCE 1943, when Dragstedt<sup>3</sup> reintroduced vagotomy as treatment for peptic ulcer, there has been a great revival of interest in the pathogenesis and method of treatment of this disease. A review of this subject has been published by one of us.<sup>1</sup> Reports are now beginning to appear of follow-up study of an appreciable number of cases. While the indications for vagotomy in the different series reported have not varied remarkably, the operation itself has been combined with gastroenterostomy, pyloroplasty, excision of the ulcer, subtotal gastric resection, splanchnicotomy, intubation of the common duct, pyloric exclusion, taking down of a gastroenterostomy, repair of hiatus hernia, and cholecystectomy, so that evaluation of vagotomy as treatment for ulcer has been rendered difficult. We have since December, 1945, used vagotomy as treatment for chronic peptic ulcer and its complications in fifty-three cases. We have used vagotomy alone in fifty cases and have added gastroenterostomy in only three cases. We have felt, therefore, that a follow-up study of these cases would give us information having a very direct bearing upon the efficacy of this new procedure.

TABLE I

Location of Ulcers	
Duodenum	43
Gastric	4
Marginal	4
None	2
	53
Age	
Average: 42.2 years	
Range: 26-61 years	
Sex	
Male: 50	
Female: 3	

For convenience of reference, we have arranged much of the routine material concerning our cases in table form. Table I deals with the location of the peptic ulcer, age of the patient, and sex distribution. It will be noted that two of our patients proved postoperatively not to have had ulcer. One of these patients came to autopsy, and no lesion was discovered in the gastrointestinal tract from the mouth to the anus which would explain the

bleeding. The second patient on subsequent laparotomy had gastrotomy and duodenotomy, but no active or old lesion was found. We have done vagotomy on four cases of gastric ulcer. This requires explanation. These patients had been admitted to the hospital with free perforation. At the time of gastrorrhaphy, the ulcers were small and nothing else of importance was noted. Sections of these ulcers were removed for biopsy and the perforation closed in the usual fashion. During convalescence the biopsies were reported as chronic benign peptic ulcer of the stomach. Transthoracic vagotomy was then done. All four of these patients have been followed closely since vagotomy, and all four have remained well. This is probably not a completely sound surgical procedure; and nothing more can be said in defense except that with free perforation of a gastric lesion, it is more likely that the lesion is benign. At least sixteen other cases of vagotomy for gastric ulcer have been reported,<sup>5,8,11,13-16</sup> and undoubtedly the use of vagotomy for treatment of highly placed gastric ulcer must interest everyone. The use of vagotomy in marginal ulceration has been recommended by many surgeons. Our four cases of marginal ulcer have had excellent results.

TABLE II

Duration of Disease	
Average duration	109 months
Range	1-390 months
Previous Complications	
Episodes of bleeding	75 in 33 patients
Severe	43
Mild	30
Perforations	16 in 15 patients
Obstructive episodes	6 in 6 patients
Marginal ulcerations	4
After gastroenterostomy	3
After gastric resection	1

It will be noted from Table II that we have done vagotomy largely upon patients who have not only had their disease for a long period of time, but have previously suffered from the complications of ulcer as well. The cases of short duration were patients admitted to the hospital with perforation of ulcer who denied previous symptomatology. We have considered one perforation as indication for vagotomy. The mild episodes of bleeding refer to small hematemesis or the passage of some tarry stool noted by the patient or attendant, but not accompanied by the general signs or symptoms of appreciable bleeding.

All but fourteen of the patients had previous medical or surgical treatment. Most of those who had no previous therapy had their disease ushered

From the Departments of Surgery, Wayne University College of Medicine and the Detroit Receiving Hospital.



TABLE III. THERAPY

No previous therapy .....	14
Previous medical therapy .....	39
Self-treatment .....	9
Sporadically supervised .....	22
Intensively supervised .....	8
Previous surgical therapy .....	24
Repairs of perforation .....	16
Repairs of jejuno-colic fistula .....	1
Gastroenterostomy .....	4
Gastric resection .....	1
Appendectomy .....	1
Hemorrhoidectomy .....	1

TABLE IV. PREOPERATIVE X-RAY FINDINGS

Positive findings .....	47 cases
Secondary findings .....	35
Definite ulcer niche .....	12
Four-hour retention .....	3
No examination .....	6 cases
Total .....	53 cases

in by severe bleeding or perforation which had been preceded by only mild chronic dyspepsia or none at all. In Table III, self-treatment is classed under medical therapy since we believe it does not differ markedly from some sporadically supervised medical treatment. Only eight out of thirty patients who underwent supervised treatment felt they had faithfully pursued treatment. Only an exceptionally well-disciplined individual will faithfully pursue strict, thorough medical treatment for such a chronic disease. Of the group who had previous surgical therapy, no special comment is required except to point out that one patient had had an appendectomy for symptoms of peptic ulcer and that another had had a hemorrhoidectomy for a clearly defined episode of upper gastrointestinal bleeding.

In six of our cases, we had no preoperative x-ray examination. These six cases were admitted to the hospital with perforation and were operated upon during their convalescence. It will be noted in Table IV that the x-ray diagnosis of ulcer was demonstrated by definite ulcer niche in only twelve or forty-seven cases. The remainder had secondary findings of local tenderness, spasticity, and deformity of the duodenal bulb. We believe these findings support the clinical diagnosis to some degree but must be accepted with caution. We know now that two of our cases had no ulcer. Each of these cases had positive x-ray findings, alleged bleeding episodes, and symptoms suggesting peptic ulcer.

A single night secretion determination is insufficient. We have had wide ranges of both secretory volume and acidity. A single night secretion may be inaccurate for one or several of the fol-

TABLE V. PREOPERATIVE ACID STUDIES

142 Determinations of Night Secretions				
Averages		Range		
Volume .....	582 c.c.	20 c.c.	to	2,390 c.c.
Free HCL .....	39°	0°	to	82°
Total acid .....	62°	12°	to	124°
43 Determinations of Gastric Analysis:				
Averages				
Free HCL .....	Fasting	15 min.	Alco.	Hist.
	20°	30°	30 min.	45 min.
Total acid .....	43°	41°	49°	47°

TABLE VI

Operative Procedures	
Transthoracic vagotomy .....	39
Left .....	33
Right .....	6
Abdominal vagotomy .....	14
Alone .....	11
With gastroenterostomy .....	3
Total .....	53
Postoperative Stay in Days	
Average .....	11 days
Range .....	4-45 days

lowing reasons: The tube may be poorly placed or become plugged; the suction mechanism may be out of order; the patient may drink; the pylorus may be unduly patent; there may be an active duodenal reflux and presence of enterostomy stoma. As shown in Table V, our average night secretion volume of 582 c.c. and acidity of 39° has seemed significant. The average acidities for our gastric analysis determinations have not been high. Here again there has been marked variation of analyses in the same patient. Many of the night secretion studies were done on patients immediately following perforation, during which period acidity and volume are low for some unexplained reason.

Table VI shows the operative procedures done. We still prefer the transthoracic approach because complete section of the vagi is essential, and it is more easily accomplished by this route. Furthermore, the procedure adapts itself to vagotomy during convalescence from perforation.

Recently, we have used the right transthoracic approach and believe the esophagus is more easily exposed on this side. Excellent anesthetic supervision is required here as in any other transthoracic procedure. Our experience with abdominal vagotomy is more limited. This route has been used for specific reasons. These are: (1) Any degree of gastric retention. (2) When the need of exploration of the abdomen arises. This may present itself when x-ray findings are equivocal or there is some question of associated pathology in the abdomen. (3) Occasionally gastric resection was proposed and subsequently altered to vagotomy be-

cause of inflammation in the gastrohepatic omentum, or because prepyloric ulceration proved on exploration to be duodenal. (4) And, finally, we have done a few for the purpose of evaluating the

varices, some were ligated. The left gastric artery was ligated, and as it was the work of but a few minutes, vagotomy was also done. The patient died eight hours later. Autopsy showed no cause

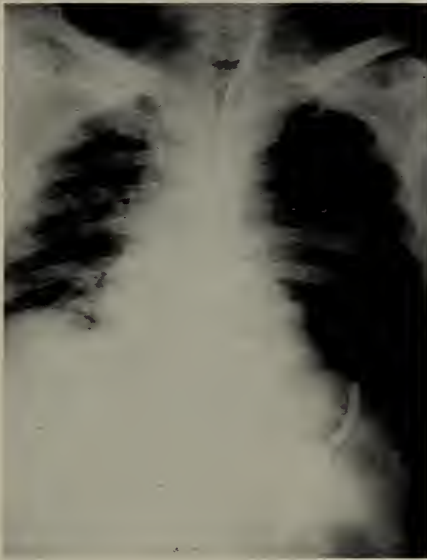


Fig. 1. Complete left pneumothorax occurring on the day of operation by abdominal route. In addition to this unusual complication, atelectasis is a frequent occurrence in abdominal vagotomy.



Fig. 2. Esophagogram taken three weeks postvagotomy. This was a right transthoracic vagotomy and the constricted area exactly corresponds to the denervated segment of esophagus. Dysphagia began two weeks after operation, lasted for three weeks, and has not recurred.

TABLE VII. IMMEDIATE POSTOPERATIVE COMPLICATIONS

Thoracic complications .....	15
Death .....	1
Organized empyema .....	1
Bronchopneumonia .....	1
Intercostal bleeding .....	1
Massive emphysema .....	1
Atelectasis .....	5
Pneumothorax .....	3
Hemothorax .....	2
Miscellaneous .....	2
Constriction of esophagus .....	1
Spinal headache .....	1

abdominal approach. Abdominal vagotomy is not without thoracic complications, as illustrated by Figure 1.

Thirty-two of our cases had no complicating postoperative incident. We have listed in Table VII our complications, no matter how mild or severe, but they are listed in order of their severity. The patient who died was admitted to the hospital with a clinical diagnosis of sublethal gastrointestinal bleeding. There had been a previous x-ray diagnosis of peptic ulcer. Emergency gastric resection was proposed, but, on exploration, no ulcer was found in the stomach or duodenum. The coronary veins of the lower third of the esophagus were then exposed, and although they were not remarkably dilated as in esophageal

for bleeding from any part of the gastrointestinal tract, and death was due to pulmonary infarction. This is the only instance in our series in which vagotomy was applied to the disease of peptic ulcer as an emergency procedure. We feel that vagotomy is an elective procedure which should only be employed after thorough work-up and deliberation.

The case of organized empyema resulted from a pneumothorax which developed when a thoracotomy tube was removed without proper caution. This necessitated the reinsertion of two thoracotomy tubes. The hemopneumothorax which resulted became infected and led to organized empyema which required decortication. The patient's postoperative hospital stay was forty-five days.

Bronchopneumonia, which one patient developed, prolonged the patient's convalescence, but at no time threatened his life. The complication of intercostal bleeding was interesting in that the patient lost 1000 c.c. of blood through his thoracotomy tube in the first twenty-four hours following operation. This bleeding was evidently from an intercostal vessel at the site of the stab wound made for the thoracotomy tube. No treatment was



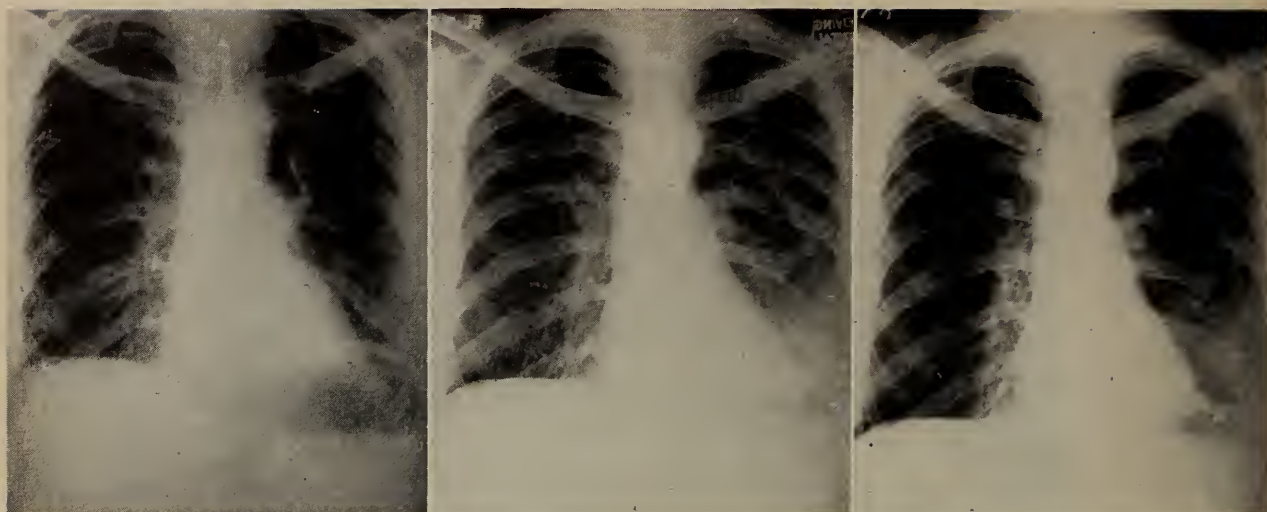


Fig. 3. Serial roentgenograms to illustrate the normal course for transthoracic vagotomy. The films are from the same case. In this instance no thoracotomy tube was used. It is necessary to follow these cases carefully and frequent roentgenograms are essential. From left to right, the first picture was taken on the first postoperative day, the second on the fifth postoperative day, the third on the twelfth postoperative day.

required except blood replacement. The other thoracic complications were all of a minor degree. Some atelectasis, pneumothorax, hemothorax, and pleuritis is to be expected following transthoracic operations.

The case of constriction of the esophagus followed a right transthoracic vagotomy in which the mediastinal pleura was not closed over the esophagus. The constricted area of esophagus corresponded to the length which was freed from its bed and denervated. The constriction began at the upper level of the incision made in the mediastinal pleura. The patient noted slight dysphagia two weeks postoperatively and required the washing down of solid foods with water. He returned to the hospital at the end of the third week when a piece of meat lodged in his esophagus. This was removed by esophagoscopy, and the esophagogram shown in Figure 2 was made. He now has no dysphagia. The difficulty experienced by this patient was not the result of cardiospasm. Although the constriction occurs in the denervated area, it is quite possible that the cause is mechanical, such as the result of rough handling or failure to return the esophagus carefully to its bed. We have had no further cases of this type, possibly because of more careful handling of the esophagus and because we suture the mediastinal pleura when doing right transthoracic vagotomies. Although Ruffin<sup>11</sup> has reported an incidence of 34 per cent mild or transient cardiospasm, this is the only case of dysphagia in our series. Many of our patients have had gastrointestinal series soon after

TABLE VIII. THORACOTOMY TUBE EMPLOYMENT

	Total Cases	Thoracic Complications
Tube employed .....	23	10 cases
Tube not employed .....	10	1 case
Average days of tube employment—2.7		

TABLE IX. POSTOPERATIVE FOLLOW-UP

By personal interview .....	32 cases
Other contact .....	13 cases
None .....	8 cases

operation; and, in each of these cases, the esophagus was examined fluoroscopically. No reports of constriction have been made.

When vagotomy has been accomplished with very little bleeding or trauma, we have closed the chest without employing a thoracotomy tube. We have listed these cases in Table VIII with the incidence of thoracic complications. We have illustrated by roentgenogram in Figure 3 the normal postoperative course of one such case. It would seem from our experience that when thoracotomy tubes are necessary, one may look forward to a higher incidence of thoracic complication.

In our follow-up in these cases we have attempted to obtain all information by personal interview. Because of the type of patient which we have had, this was not always possible (Table IX). The term "other contact" in Table IX refers to information obtained from out-patient records or from patient interviews by other physicians.

The great majority of our cases have been operated upon within the past year. Table X lists the

TABLE X. MONTHS SINCE VAGOTOMY

19-24 months inclusive .....	2 cases
13-18 months inclusive .....	6 cases
7-12 months inclusive .....	24 cases
1-6 months inclusive .....	21 cases

TABLE XI. POSTOPERATIVE X-RAY FOLLOW-UP

	Without Symptoms	With Symptoms	Total
Negative findings .....	28	2	30
Positive findings .....	6	1	7
No follow-up .....	—	—	16
Total .....	34	3	53

TABLE XII. DIARRHEA

None .....	32
Mild sporadic .....	13
Severe sporadic .....	4
Mild persistent .....	1
Severe persistent .....	1
No information .....	2
Total .....	53

number of cases according to months since operation. This table also indicates our continued use of the procedure.

The comparison of preoperative and postoperative gastric analyses is shown in Figure 4. With reference to gastric analysis, there has been an average reduction of free hydrochloric acid secretion of 25 per cent to 30 per cent in all specimens. Preoperative and postoperative night secretions are shown in Figure 5. We note approximately 50 per cent reduction in average volume of night secretion and approximately 60 per cent reduction in average free acidity. The total acidity is only slightly affected.

Thirty-seven patients have had postoperative x-ray examination. The three who are listed in Table XI as having symptoms represent our unsatisfactory results. It will be noted that two of these had a negative gastrointestinal series postoperatively. The third is listed as having positive findings. However, there are six others in whom we also have positive x-ray evidence of persisting ulcer who do not have persisting symptoms and clinically represent good results from vagotomy.

Of all the postoperative sequelae, diarrhea represents one of the most common and most frequently reported. Diarrhea occurred in 37 per cent of our patients. In Table XII, we have attempted to classify them according to persistency and severity. The majority have mild sporadic diarrhea. Two had persistent diarrhea of varying

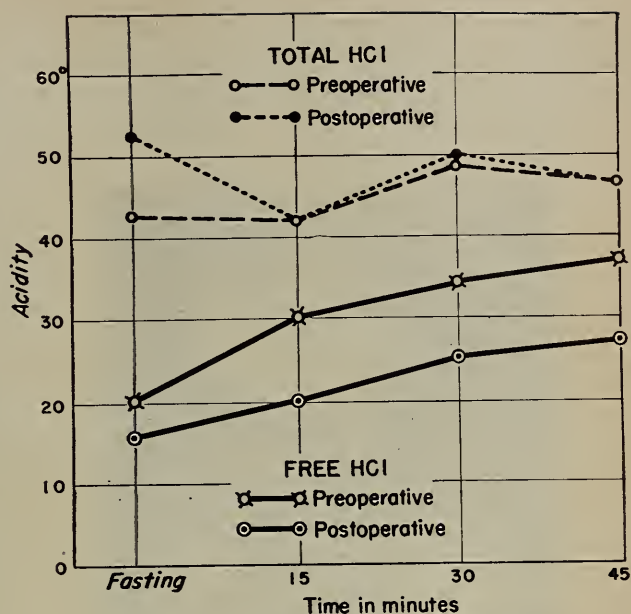


Fig. 4. Comparison of gastric analyses.

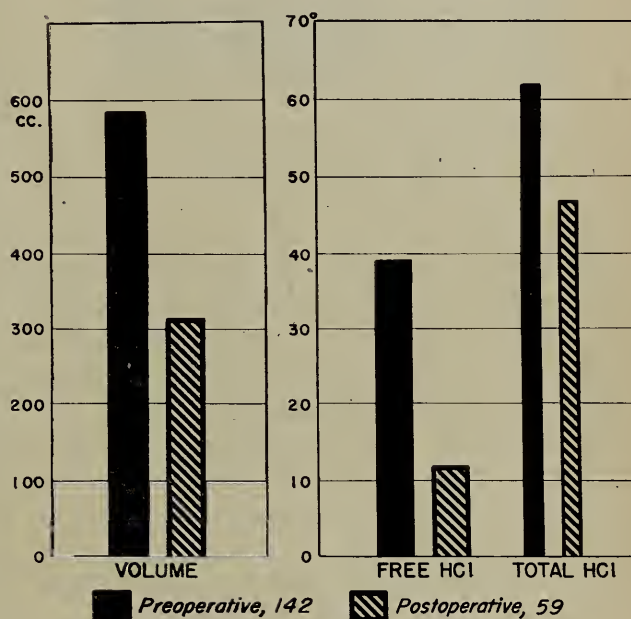


Fig. 5. Comparison of night secretion studies.

degrees of severity. Both of these patients also feel unrelieved of their peptic ulcer symptoms and are unsatisfactory results. The diarrhea which we have observed following this operation is definitely benign. We have not observed blood or pus. In a few of our cases, barium enema, stool examination, estimations of carbon dioxide combining power, blood chloride, and serum protein determinations have been done. These investigations have been negative. Most of the patients can easily control their diarrhea by diet or



small doses of paregoric. Even with diarrhea, they generally gain weight. The characteristic feature of the diarrhea in most instances is that it occurs for irregular periods of time. It usually consists



Fig. 6. Ninety per cent gastric retention in four hours, twelve months postvagotomy. The patient is well and has gained 17 pounds, but still occasionally complains of bloating.

of clear, watery material, and frequently follows a regular bowel movement. It also tends to come on soon after eating. Diarrhea and bloating are not related conditions. Of our nineteen instances of postoperative diarrhea, eleven had no bloating, and seven cases of bloating had no diarrhea. Although eight cases of diarrhea had associated bloating, our two instances of severe bloating were not accompanied by diarrhea, nor were two cases of persistent diarrhea accompanied by bloating. The incidence of diarrhea is variable according to other authors. Johnson and Machella<sup>7</sup> reported no cases of diarrhea in their patients. Dragstedt<sup>2</sup> believes that the diarrhea is associated with gastric drainage and states that the incidence of diarrhea is less in those patients with gastroenterostomy. On the other hand, Moore<sup>8</sup> finds no correlation between diarrhea and gastroenterostomy. Over one-half of his patients had diarrhea at one time or another. Ruffin<sup>11</sup> reports an incidence of 48 per cent and, again, no relation to gastric retention or gastric acidity.

We have had no cases of severe intercostal pain, as reported in the literature. As measures to eliminate intercostal pain, we have crushed the eighth intercostal nerve, or sectioned the eighth

TABLE XIII

Intercostal Pain		Bloating	
None .....	14	None .....	31
Mild .....	14	Moderate .....	13
Severe .....	0	Severe .....	2
Anesthesia .....	3	No information .....	7
No information .....	2		
Total .....	53	Total .....	53

intercostal nerve, or sectioned the eighth intercostal nerve and crushed the nerve above and below. We have more recently begun omitting these procedures because we do not feel they have been of value. As will be noted in Table XIII, we have had local anesthesia listed as a complaint in three cases. Moore,<sup>8</sup> in his cases, found intercostal pain to be a complaint in only 3 per cent. Dragstedt<sup>2</sup> claimed that it was troublesome in ten out of sixty-one patients. Seabrook<sup>13</sup> reports five instances of intercostal pain in sixteen cases.

Bloating is definitely associated with gastric retention. Of the two severe cases which we have listed, one we know is well today, and of the other we have no information. These patients complain of gastric fullness, belching, and fetid breath. They do not identify these symptoms with their previous peptic ulcer symptoms. It should be borne in mind that long-continued evidence of gastric retention may be due not only to gastroplegia, but to scarring and contracture of the healed duodenal ulcer, or inflammatory edema surrounding a recurring ulcer. We have had several instances of bloating persisting for as long as twelve months, only to eventually clear. Figure 6 illustrates a case with persistent gastric retention. A number of procedures have been used to eliminate postoperative gastric retention. These include gastroenterostomy, and pyloroplasty. These procedures in themselves will not prevent gastric retention. As an example of this, Walters<sup>16</sup> reported that in fourteen cases without gastroenterostomy there were four cases with gastric retention. In fifteen cases combined with gastroenterostomy, there were also four cases. Dragstedt's<sup>2</sup> incidence of retention has been definitely less in the patients in whom he has performed gastroenterostomy, but this experience has not been universal. Thomas Johns and William Grose<sup>6</sup> reported 60 per cent gastric retention, and they report that their best results have followed vagotomy combined with gastroenterostomy or pyloroplasty. Ruffin<sup>11</sup> reports 70 per cent in a series which he

TABLE XIV. PERSISTING PEPTIC ULCER SYNDROME

No .....	41
Yes .....	3
No information .....	8
Death .....	1
Total .....	53

studied, and nine cases had subsequent operation because of retention. Grimison<sup>4</sup> found it necessary to perform gastroenterostomy in one out of every seven cases.

Information concerning the persistence of the peptic ulcer syndrome, we think, is of great significance, as these patients have had years of familiarity with it. The patients who have claimed the absence of their previous syndrome we have considered as satisfactory results. We know of no better criterion. None of these patients have had undesirable sequelae of any consequence.

One of us<sup>1</sup> has written that he doubted the necessity for gastroenterostomy where there is no preoperative evidence of obstruction. Our follow-up studies support this view. Thorlakson<sup>15</sup> also reports that gastroenterostomy is seldom required. Moore,<sup>8</sup> in his summary, states, “. . . The minor gastrointestinal side effects are not vitiated by the performance of gastroenterostomy.”

The three patients in Table XIV who have persisting peptic ulcer syndrome, two of whom are also on restricted diets, we have listed as unsatisfactory results, and they will be discussed later.

Of the patients whom we have been able to follow, thirty-nine are on completely unrestricted diets which include the use of tobacco, coffee, and alcohol; and two are on restricted diets. The latter will be discussed later under unsatisfactory results. Table XV also shows that 93 per cent have gained weight in amounts varying from 3 to 40 pounds, with an average of 13.8 pounds. Weight gain is one of the more remarkable effects of vagotomy.

We have performed insulin tests on fifteen patients. We have modified it to suit our own peculiar conditions. The test as we have employed it has been performed in the out-patient department. The patient comes to the clinic without breakfast. A fasting gastric specimen is obtained. Twenty units of insulin are then injected subcutaneously. At periods of one hour, and one and one-half hours, a blood specimen and a gastric specimen have been taken simultaneously. In all instances, we have obtained a drop of blood sugar well below 50, so that the stimulation pro-

TABLE XV

<i>Postoperative Dietary Restrictions</i>	
Unrestricted .....	39
Restricted .....	2
No information .....	12
Total .....	53
<i>Weight Gain</i>	
Gained .....	29
Lost .....	2
No information .....	22
Total .....	53
Average gain .....	13.8%
Range .....	3 to 40%

TABLE XVI. RESULTS OF INSULIN TEST

Total patients tested .....	15
No response to hypoglycemia .....	5
Cured .....	4
Not cured .....	1
Response to hypoglycemia .....	10
Cured .....	9
Not cured .....	1

vided by hypoglycemia has been present. The fact that we have obtained responses to hypoglycemia convinces us that the test has been satisfactorily performed. The responses have not been high, ranging between 25° and 50° of free hydrochloric acid. As seen in Table XVI, the test would indicate that we have done incomplete sections in two-thirds of our cases. One unsatisfactory case falls into each category. We do not understand these results inasmuch as clinical results do not support them. We certainly would not reoperate on patients on the basis of this test alone, but would welcome a more accurate method of determining complete vagal section. Smith, Ruffin, and Bayliss<sup>14</sup> found no correlation of this test to acid changes, gastric motility, or clinical effects. Walters, Neibling, Bradley, Small, and Wilson<sup>16</sup> have reported that of twenty-eight insulin tests, twenty-six showed complete section. Orr and Johnson<sup>9</sup> report an insulin-positive group of fifteen cases in which they had one bad and three poor results. They had no bad results in thirty-four cases of insulin-negative vagotomies. An interesting variation of the insulin test has been reported by Illingworth and Kay,<sup>5</sup> who have used 5 mg. of prostigmine with balloon distention studies of the stomach. They have compared preoperative and postoperative tracings for evidence of complete denervation. Paulsen and Gladsden<sup>10</sup> had six positive insulin tests out of twenty-four. Sanders<sup>12</sup> reports three patients whose acids were higher in response to insulin following operation than before. Despite this, none of the three patients had any symptoms. One might gather that perhaps partial section of the vagus nerve might



TABLE XVII. SUMMARY

Number of patients .....	53
Duodenal ulcer .....	43
Gastric ulcer .....	4
Marginal ulcer .....	4
Transthioracic vagotomy .....	39
Abdominal vagotomy .....	11
Abdominal vagotomy plus gastroenterostomy .....	3

TABLE XVIII. SUMMARY OF RESULTS

Relief of ulcer symptoms .....	91%
Weight gain .....	93%
Unrestricted diet .....	95%
<i>Undesirable Sequelae</i>	
Diarrhea .....	37%
Bloating .....	33%
One death in 53 cases	

be satisfactory, but in an article by Weinstein, Colp, Hollander, and Jemerin,<sup>17</sup> six cases are presented in which incomplete vagotomy was performed. In all instances the insulin test indicated the true state of affairs and in none of their cases could they claim beneficial results.

Table XVII summarizes the material which we have been reporting upon. In Table XVIII we have summarized our results. We have had three unsatisfactory results. The first patient has since his operation gained 12 pounds. He has had no diarrhea. His gastrointestinal series is negative. His insulin test, however, indicates incomplete section of the vagi. He is also on a mildly restricted diet, but claims that he still has the peptic ulcer syndrome. A second patient has gained 13 pounds and has had mildly persistent diarrhea. His gastrointestinal series is negative and he is on an unrestricted diet, but he too claims a persisting peptic ulcer syndrome. The third patient has shown no weight gain. He has had severely persistent diarrhea. His gastrointestinal series is positive and shows a fleck of retained barium in his duodenal bulb. He is on a restricted diet, claims persisting peptic ulcer syndrome, but his insulin test indicates complete section. It is interesting, but probably not significant, that all three of these patients had abdominal vagotomy. Also, the second patient, although he had gastroenterostomy done at time of vagotomy, has continued with a mildly persistent diarrhea. With regard to these three patients, first, we are not certain that each has had complete section of his vagus nerve, and the insulin test does not help us determine this fact. Second, the postvagotomy x-ray findings have been difficult to evaluate. Third, the psychic factor, which is almost always prominent in peptic ulcer, adds an additional difficulty to clinical evaluation. We are following

these patients with medical and dietary therapy and shall report on their progress later.

### Summary

Our follow-up study of fifty-three cases indicates that we can expect vagotomy alone to produce satisfactory results as treatment for peptic ulcer in approximate 90 per cent of the cases. These patients are immediately relieved of their unpleasant symptomatology. They begin almost immediately to follow unrestricted diets and approximately 90 per cent of them gain weight, with the average weight gain being about 13 pounds. We may anticipate from this factual material that about 33 per cent of them will have varying degrees of difficulty due to gastric retention, and that 37 per cent of them will have diarrhea, although only in the rare instances will the diarrhea be severe.

We do not believe gastroenterostomy or pyloroplasty necessary where there is no preoperative gastric retention, and in this short follow-up period we have not found it necessary to reoperate upon them for gastric retention. At this moment, we are pleased with the effects of vagotomy upon these patients and will continue to use it as the principal surgical therapy for chronic peptic ulcer of the duodenum and marginal ulcer. In this regard, we quote Orr and Johnson<sup>9</sup> who have written, "A lasting success by vagal resection is a triumph of physiological strategy, and a failure spells disappointment but not disaster."

NOTE: Since this paper was submitted for publication, we have studied twenty-five additional cases. Our follow-up findings in this latter group in no way alter our conclusions.

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# Cancer of the Cervix Uteri in Young Women

By Alexander B. Procaïlo, M.D., and  
Darrell A. Campbell, M.D.

Eloise, Michigan



A. B. PROCAILO

**C**ERVICAL CARCINOMA is most frequent in the years immediately preceding and including the menopause and is relatively common until the age of sixty. Although every gynecologist sees an occasional young patient with this disease, it is considered to be rare before the thirtieth year and infrequent before the age of forty. This should not, however, permit the examining physician to relax in his effort to recognize the disease and its precursors at the earliest possible moment or to institute proper and energetic treatment as early as circumstances will allow. It is the purpose of this report to show the incidence and course of cancer of the cervix in women thirty years of age and younger at the Wayne County General Hospital.

## Incidence

The greatest incidence of cervical carcinoma is found between the ages of forty-five to fifty. In a fifteen-year period, from 1932 through 1947, a total of 751 carcinomas of the cervix were observed in the Wayne County General Hospital. The average age of these patients was forty-nine years. Of the total number, sixty-one were thirty years of age or younger, an incidence of 8.0 per cent. This is slightly higher than that reported by Kaplan and Rosh (5.1 per cent),<sup>8</sup> Hall (7.4 per cent),<sup>6</sup> and Schreiner and Wehr (4.9 per cent).<sup>22</sup> Most observers agree that the age of the patient unquestionably affects the prognosis, although Kaplan et al disagree with this widespread belief. The age distribution in this series is shown in Figure 1.

This series is too small and the variables too many to suggest that the increased incidence of this disease in this age group may represent a significant trend. It may only reflect the great emphasis placed upon this disease as a diagnostic pos-

sibility in every patient with a cervical lesion regardless of symptoms.

## Etiology

Many gynecologists<sup>2,24</sup> believe that the trauma of childbirth, notably lacerations with eversion and/or erosions of the cervix, are important factors in the etiology of cervical cancer. It is largely a problem for the statistician to evaluate the significance of this and other factors. Current opinion based upon relatively small series of cases is confusing.<sup>24,27</sup> Kaplan and Rosh,<sup>8</sup> for example, conclude that childbirth did have a definite influence in the formation of cancer of the cervix because more than half (53.7 per cent) of their patients had borne four or more children. In our series, seven (12 per cent) had borne no children at all, and only ten (17 per cent) had four or more pregnancies, many of which ended with abortions (Fig. 2). This low incidence of multiparity may not exonerate the trauma of childbirth as an exciting factor in development of cervical cancer, for insufficient time has elapsed for patients in this age group to have borne large families.

Hall,<sup>6</sup> and Schreiner and Wehr<sup>22</sup> assumed from their study that early marriage and often early pregnancy with possible resulting cervicitis must be considered as a causative factor in cancer of the cervix in young women. Endocervicitis is considered by some<sup>2,4,22</sup> to represent a precancerous stage, which need not necessarily go on to true cancer development.

The great volume of statistical data now accumulated fails to demonstrate that race, nationality or venereal disease has any significance in the etiology of cervical carcinoma.<sup>2,8,25</sup> Our series shows a ratio of thirty-three colored patients to twenty-eight white patients. This incidence is somewhat higher than the admission percentage of colored patients to this hospital.

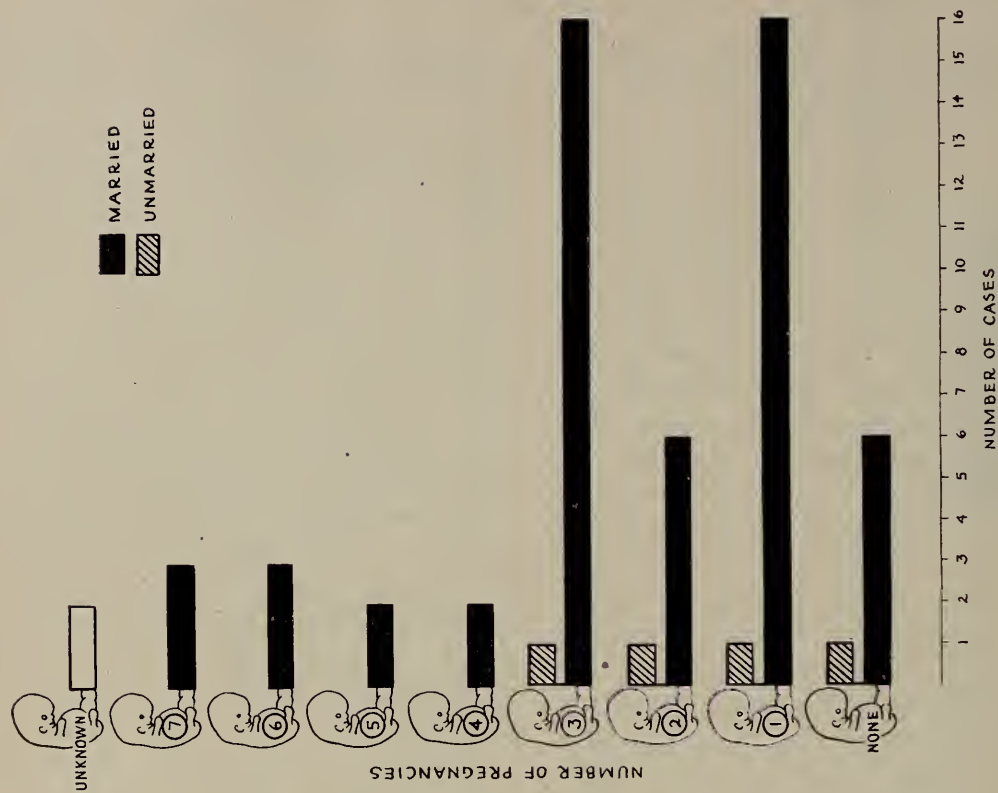
## Pathology

Cancer of the cervix is chiefly of the squamous cell (epidermoid) variety; much less frequently, in less than ten per cent of the cases, adenocarcinoma is encountered.<sup>18</sup> None of our patients had a diagnosis of adenocarcinoma. The pathological grades are classified according to Broders<sup>1</sup> (Fig. 3).

Forty-two patients fell into Grades III and IV (80 per cent). This is not contrary to the usually accepted rule that younger persons have more anaplastic, rapidly growing malignancies. While this

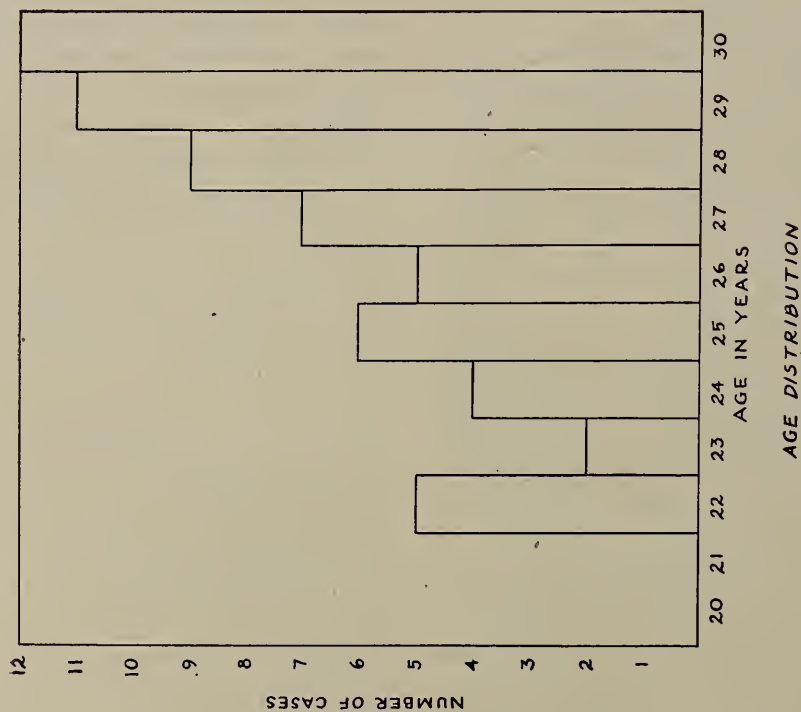
From the Department of Surgery and Gynecology, Wayne County General Hospital and Infirmary, Eloise, Michigan.





MARITAL AND CHILDBEARING RECORD

Fig. 2



AGE DISTRIBUTION

Fig. 1

may be true for many malignant neoplasms, it has been suggested that this is not necessarily true of cervical carcinoma. Accordingly, 138 cases, all of whom were over fifty years of age, were reviewed in

this disease, particularly in the screening of suspected cases. Meigs<sup>13</sup> in a study of 2,749 cases reports only 3.2 per cent error in diagnosis.

The importance of valuable symptoms should

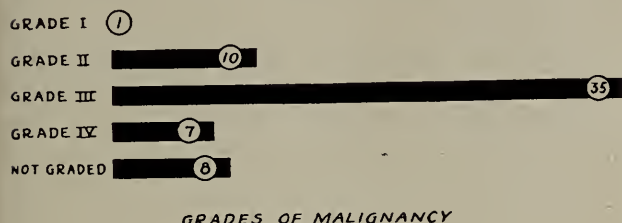


Fig. 3

respect to pathological grading. Seventy-seven per cent of the lesions in this older age group were classified by the same pathologist as Grades III and IV. This would suggest that age plays an unimportant part in determining the relative malignancy of the lesions, and can hardly be held accountable for any variation in survival rates in various age groups.

Early squamous cell carcinoma is usually found confined to the cervix at the point where the vaginal epithelium meets the epithelium of the cervical canal. The disease spreads by extension into the parametrium, broad and sacrouterine ligaments, bladder and vaginal mucosa. The regional lymph nodes are involved by way of the lymphatics. Malignant spread to the parametrium and lymph nodes presents the greatest obstacle in achieving a cure.<sup>14</sup> Progress of the disease frequently is marked by complications which occur as a result of the extension of the disease.

No significant complications in our study were observed in those cases in Stage I. In Stage II four had intestinal complications and one had ureteral obstruction. Three cases of ureteral obstruction occurred in Stage III. All the remaining patients with significant complications (nineteen) were in Stage IV. These were as follows: vesico-vaginal fistulae, four; rectovaginal fistulae, five; intestinal complications, two; ureteral obstruction, five; and severe urinary bladder dysfunction, three.

### Diagnosis

Until recent times, the clinical diagnosis of cervical cancer has been based upon tissue friability, bleeding, and change in the character of the vaginal secretion, confirmed by histologic study. Studies concerning the cytology of the vaginal epithelium, introduced by Papanicolaou and Traut,<sup>19</sup> may prove to be of further assistance in the early diagnosis of

SYMPTOMS	NO. PATIENTS	PERCENTAGE
INTERMENSTRUAL VAGINAL BLEEDING	35	58
YELLOWISH OR WHITE DISCHARGE WITH BLOOD	9	15
YELLOWISH OR WHITE DISCHARGE WITHOUT BLOOD	10	17
PAIN	3	5
POSTCOITAL BLEEDING	2	3
BLEEDING WITH PAIN	1	2
UNKNOWN	1	

### PRIMARY SYMPTOMS

Fig. 4

not be underrated, however, for a patient must first be a suspect before the disease is proven.

In general, the symptoms which lead one to suspect carcinoma of the cervix in this age group do not differ widely from those of older women. Hemorrhage or bloody discharge is the most important symptom. The amount of bleeding varies greatly, but outstanding features are intermenstrual spotting, progressive increasing hemorrhage during menstruation, and postcoital bleeding. In our series, forty-seven patients had intermenstrual bleeding with or without other symptoms (Fig. 4). This high incidence confirms the importance of this symptom in leading the examining physician to consider such a patient a suspect.

Loss of weight, cachexia, pain, enlargement of inguinal lymph nodes, swelling of the limbs and offensive leukorrheal discharge are of no value in the early diagnosis of the disease. These represent late manifestations and the course of the disease will be little altered by any therapy after they appear.

Lupton and other clinicians<sup>9,11,22</sup> believe that the first symptom is increasing leukorrhea. It is their contention that certain amount of vaginal secretion is normal but a definite leukorrhea is pathological and its nature must be determined. Nineteen patients in this series (31 per cent) noted increasing leukorrhea with or without blood as the first symptom. Nine patients (15 per cent) complained of leukorrhea as the only symptom. This incidence is the same as reported by Miller.<sup>14</sup> It may be that many of our patients had increasing leukorrhea as the primary sign but failed to recog-



nize it as a danger signal and, therefore, did not seek early medical attention until intermenstrual hemorrhage occurred.

The duration of symptoms at time of admission is shown in Figure 5.

### Treatment

Early confirmation of the diagnosis in suspected cases followed immediately by the institution of

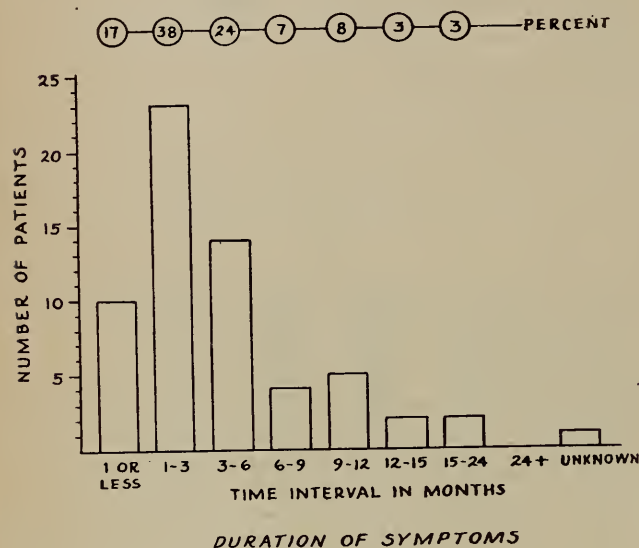


Fig. 5

appropriate therapy is of great importance. Valuable time may be lost if biopsies must be repeated, too many committees are interviewed or an indifferent attitude is adopted in advising the patient as to the importance of immediate treatment. Since the Curie Institute in 1920<sup>20</sup> conclusively demonstrated the value of roentgen and radium irradiation and its superiority over surgery in treatment of cervical cancer, this method of treatment, with a few modifications, has been followed at the Wayne County General Hospital. In recent years, our patients have been treated by an initial course of roentgen rays, averaging 6,000 r. distributed equally over one anterior and two posterior oblique pelvic ports. The physical factors employed in external irradiation have been: 50 centimeters target-skin distance, 200 kilovolts, 25 milliamperes, 2 millimeters of copper plus 1 millimeter of aluminum added filtration. This was immediately followed by an average of 5000 mg. hrs. of radium therapy. Radium therapy was administered by the use of a cervical tandem containing two 50 milligram units with filtration equivalent of .5 millimeter of platinum.

For various reasons not all patients have been treated in this manner. Two had radium alone, and thirteen had roentgen therapy without radium. Omissions in the completion of treatment were largely due to lack of co-operation upon the part of the patient.

Recent reports have advised a Wertheim type of hysterectomy, in selected cases of early malignant disease of the cervix in which the surgical risk was good. These reports indicate that a larger number of five-year survivals have been secured and few postoperative complications have occurred.<sup>12,16</sup> Since the revival of interest in the surgical treatment of cervical malignancy, six patients have been surgically treated at this hospital but only three radical abdominal hysterectomies and pelvic lymphadenectomies were performed in this younger age group. Since these operations were carried out within recent months, we cannot draw any conclusions as to the efficacy of this method of treatment. In this connection, it may be interesting to note that one of our twenty-eight-year-old patients was operated upon for papillary cystadenoma of the ovaries in 1933. A routine total hysterectomy was performed. The histological report showed squamous cell carcinoma Grade II which was not suspected prior to the operation. This patient is alive today with no evidence of recurrence after fifteen years.

As a rule, the clinical stage of cervical cancer is a better index regarding prognosis and response to treatment than the histopathological grade of the disease.<sup>14</sup> Though survival for five years following treatment is in no sense a criterion of a "cure,"<sup>18</sup> it is a simple and generally accepted method of reporting results of therapy. The stage of the disease at the time of admission was recorded according to the classification of Schmitz (Fig. 6).

All patients except one have been traced by the Social Service Department, and of the entire group 82 per cent are known to be dead. Four five-year survivals have occurred in Stage I and Stage II (two are ten-year survivals), which represents 6.6 per cent of the entire group. Seven others are still alive in these stages but insufficient time has elapsed to include them as five-year survivals. Should none succumb, the five-year survival rate may be increased to 18 per cent for the entire group, and to 47.8 per cent for those classified as Stages I or II. No patients classified as Stage III or IV have survived five years and only one patient remains alive at this date who may possibly do so.

# CANCER OF THE CERVIX UTERI—PROCAILO AND CAMPBELL

STAGE (SCHMITZ)	NO. OF CASES	SURVIVAL		DIED
		LESS THAN 5 YEARS	5 YEARS	
I (15%)	9	4	2 (22%)	3
II (23%)	14	3	2 (14%)	9
III (23%)	14	0	0	14
IV (34%)	21	1	0	20
NOT RECORDED (5%)	3	(1 UNTRACED)		2
ABSOLUTE (100%)	61	9	4 (6.6%)	48

CLASSIFICATION AND SURVIVAL

Fig. 6

This is a dismal outlook indeed for women of this age group so afflicted. Some explanations for the high incidence of advanced disease, and the accompanying low five-year survival rate can be assumed from a careful study of the histories of these patients. Some of the more important are:

1. Women of this age group are not considered to be candidates for this disease and in consequence are not looked upon as suspects.

2. In less well educated groups there is a significant incidence of lack of co-operation in respect to the completion of adequate therapy.

3. Gynecological symptoms, such as menstrual irregularity, leukorrhea, and others, occur more commonly in this age group and hence do not serve to alarm the patient or the doctor.

4. There is a lack of a program of periodic health examinations.

5. Women of this age group may be more reticent about consulting a physician relative to their gynecological disturbances.

## Summary and Conclusions

1. The incidence of carcinoma of the cervix in women thirty years of age or younger was found to be 8.0 per cent in the Wayne County General Hospital.

2. Vaginal bleeding is the most important and most common symptom of carcinoma of the cervix in young women. It was found in 78 per cent of the cases, while 58 per cent presented bleeding as the only symptom.

3. Cervical carcinoma may run a more rapid and virulent course in young women than does the same disease in older women. Histologic grading (Broders), however, of lesions in this age group does

not differ significantly from a similar series in women over fifty.

4. Radiotherapy is still the treatment of choice in the majority of cases. Insufficient data exists to offer comments concerning the advisability of radical abdominal hysterectomy and pelvic lymphadenectomy in this age group.

5. The majority of patients in this series presented themselves to the hospital with advanced disease. Possible reasons are enumerated.

6. Carcinoma of the cervix in young women is not rare. Earlier diagnosis, through education of the public with regular periodic examinations and an alert medical profession, will assist in reducing the mortality from this disease.

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# Pseudomyxoma Peritonei of Ovarian Origin

## Report of Three Cases

By Harry M. Nelson, M.D., Detroit, Michigan, and  
Mahlon S. Sharp, M.D., Lansing, Michigan

**M**OST MODERN gynecological textbooks, even though they discuss the cystic tumors of the ovary in a comprehensive manner, elaborate but little on the subject of pseudomyxoma peritonei. This not uncommon sequel of the pseudomucinous cystadenomata has received inadequate attention in the literature for the last fifteen years. With the exception of the almost universal use of post-operative radiation, there has been little change in the handling, understanding, or clinical course of the disease since Werth<sup>12</sup> in 1884 conclusively demonstrated in his own and previously reported cases the relationship of the peritoneal affection to the ruptured ovarian cyst.

Prior to this and only shortly after ovariectomy became commonly practiced, we find excellent and accurate descriptions of multilocular proliferating glandular colloid cysts of the ovary and occasionally associated "colloid cancer" of the peritoneum. These unhappy patients were usually treated by incomplete evacuation of the jelly and by peritoneal drainage, with quite uniformly unfortunate results. The term "colloid cancer" was soon recognized as unsuitable and Mennig designated this condition "pseudomyxomatous degeneration of the peritoneum." Virchow referred to it as "chronic pseudomyxomatous peritonitis." Both apparently considered it a primary disorder of the peritoneum, a mistaken idea that persisted until the investigations of Werth. He also showed that the peritoneum did not itself secrete the mucoid material, but put out fine connective tissue processes in an attempt to wall off, and formed newly proliferated blood vessels in a futile endeavor to absorb the foreign substance. He preferred to identify this condition as "pseudomyxoma of the peritoneum."

Olshausen and Ackerman<sup>6</sup> demonstrated the presence of clumps of cells or glandular structures composed of cylindrical epithelium in the gelatinous masses and regarded the process as really an

aseptic peritonitis, and the accumulation of the jellylike material as due to the secretory activity of the implanted cellular elements. This then explained the continuation of the process after the complete removal of the ruptured ovarian cyst. There was needed then only the experimental work of Grodinsky and Rubnitz<sup>3</sup> to show by the injection of cell-free filtrates into the peritoneal cavities of rabbits that a perpetuating process was not thereby established. This interesting and valuable work was done by ligating the washed appendices of rabbits and producing at will mucocoeles whose contents bore a similar relationship to the peritoneum as do the contents of a pseudomucinous cystadenoma of the ovary. This had been known since 1901, when the same peritoneal lesion as that with which we are concerned was described by Fraenkel<sup>1</sup> as resulting from the rupture of an appendiceal mucocoele in a male. It is interesting to note in passing that pseudomyxoma peritonei even of ruptured appendiceal mucocoele in origin is still largely a disease of the female. Weaver<sup>10</sup> collected 256 cases of mucocoele, from which there resulted forty-nine instances of pseudomyxoma peritonei, thirty-five of which were in women and only fourteen in men.

Unusual cases have been recorded where the peritoneal involvement originated in the biliary system or diverticula of the gut. Any similar glandular epithelium may, it seems, produce a tumor, that if placed in communication with the peritoneum, may involve it. Masson<sup>5</sup> operated a case of cystadenoma of the anterior wall of the uterus. The primary tumor was composed of glandular elements closely resembling endocervical glands and a typical involvement of the peritoneum was present.

Conducive to conjecture is the extraordinarily high incidence of associated appendiceal mucocoele with pseudomyxoma peritonei of ovarian origin. Masson and Hamrick<sup>5</sup> report two such instances. Eden in the discussion of Wilson's Paper<sup>13</sup> reports one, and in the three here reviewed by the authors there is one such coincidence. In forty random cases there are, then, four appendiceal mucocoeles, coexisting with pseudomyxoma peritonei of unquestioned ovarian origin.

### Pathology

There have been no better descriptions of the process of formation than that of Wilson<sup>13</sup> in 1913: "Towards the distal pole of the ovarian tumor the

From the Department of Gynecology of the Woman's Hospital. Dr. Sharp was the Resident in 1947.

loculi become larger and the capsule of the tumor as well as the dividing septa becomes even more delicate and thin until finally it gives way in one or more places and the jellylike material oozes quietly into the peritoneal cavity. This process appears never to give rise to definite symptoms; it would seem to occur in a gradual and gentle manner as the result of a mere dehiscence, and not of a violent or sudden perforation or rupture. When rupture has taken place the jellylike material continues to be poured out in large quantities into the peritoneal cavity, where it comes in contact with all the organs. The tenacious consistence appears to prevent its sinking by gravity into the pelvis and it is commonly found between the diaphragm and the upper surfaces of the liver, spleen, and stomach." Often large masses of the material accumulating on the viscera appear to be pedunculated. The material in its consistency, sometimes quite hard, may be adherent or apparently infiltrating in any part of the visceral or parietal peritoneum. An instance is recorded where the diaphragm was almost completely destroyed.<sup>5</sup> Also large accumulations, varying from those described as clear and viscid to the darker and hemorrhagic, some of the appearance of sago pudding or frog spawn, may be found free in the abdomen. The omentum is usually involved to a greater or lesser degree. It may only show a slight inflammatory change or it may be apparently infiltrated to form a dense hard plaque—the "omental cake" of the older writers.

Microscopically the disease seems to be an admixture of many processes. To quote Geist,<sup>2</sup> "these include neoplasia, foreign-body peritonitis, and transformation of the subepithelial connective tissue." The substance in which the cellular elements are suspended, at least initially, is pseudomucin, which has been studied extensively by Pfannenstiel.<sup>7</sup> He divided it into three types: pseudomucin alpha, beta, and gamma. The alpha is soluble with difficulty in water. The beta is insoluble in water but soluble in alkaline solutions. The gamma component is easily soluble in water. Wilson<sup>13</sup> also examined the gelatinous substance from a number of cases and concluded that water was a poor solvent, boric or any acid solution was still less effective, and normal saline was successful with all of the samples that he tested. Usually the saline produced an immediate softening and swelling, and eventually complete dissolution took place.

The cells themselves, either individually, or clumped in clusters, strips, or even in small gland formations, are typically pseudomucinous, cylindrical epithelium containing a basal nucleus and

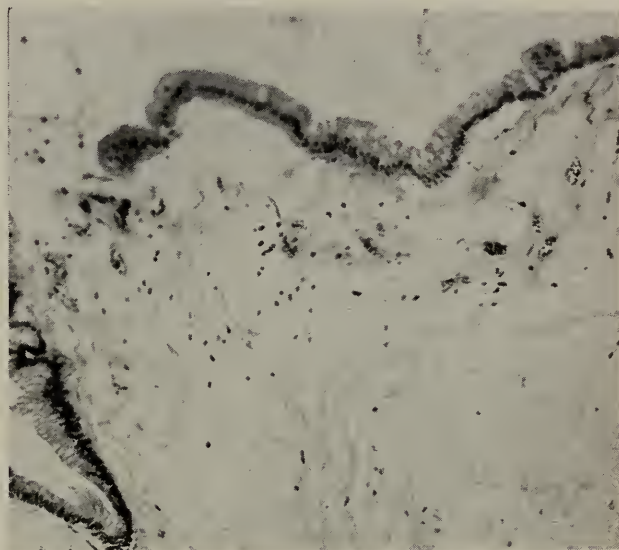


Fig. 1. Microscopic section of pseudomyxoma peritonei (Case 3), revealing mucus-producing cylindrical epithelium, supported by loose edematous connective tissue. H & E stain X 150.

finely granular or, especially near the surface, clear cytoplasm (Fig. 1). Throughout the mass of pseudomucin, fine connective tissue processes may be found. These may contain or be associated with fine newly proliferated blood vessels. The peritoneum itself becomes eventually a connective tissue structure. The epithelium degenerates and is lost after penetration of the subepithelial spaces by the pseudomucin, producing at first edema, then proliferation of fibroblasts. It is impossible to look at very many sections of peritoneum without observing numerous occluded lymph channels, and so another element of the normal defensive function of the peritoneum and omentum is removed.

In any system of classification of pseudomyxoma peritonei there are at least four stages or phases theoretically possible:

*Phase I.*—The peritoneum at least initially receives the pseudomucin passively. This is probably only a brief stage of transition in the establishment of the usual process. A very few may go no further.

*Phase II.*—An aseptic foreign body peritonitis is established. Limited absorption occurs, with resultant obstruction of the lymph drainage, and fibrous change occurs which is accompanied by vascular proliferation.

*Phase III.*—This is probably an overlapping process in most instances. The glandular epithelium becomes implanted and may become actively secretory or atrophy



after a period of activity. Weig and Loenig<sup>11</sup> demonstrated by roentgenograms atrophic epithelial implants that had undergone calcification. Hertzler<sup>4</sup> makes the observation that it is always surprising that such a quantity of pseudomucin can be produced by the small number of implanted cells.

*Phase IV.*—True metastases may occur corresponding to the implants in Phase III. In some instances it is rather obvious that metastases have occurred from a cyst-adenocarcinoma of the ovary, and in others the carcinomatous change appears to have occurred in the pseudomucinous epithelial implants even after the primary has been removed.

The prognosis in any given case is probably much more dependent upon the stage where, in the above sequence of events, the process is interrupted, than upon what is done for the patient in the way of treatment.

### Clinical Course

Although histopathological evidence of true malignancy is not so frequently present, many writers have described the clinical course as almost uniformly malignant. It is easily understandable from the above description of the pathology of the disease why it characteristically has a silent onset. The usual first complaint made by the patient is gradual enlargement of the lower abdomen. This was present in 63 per cent of Masson and Hamrick's series and in 100 per cent of the cases here presented. Pain, usually not severe, was a presenting symptom in 50 per cent of Masson and Hamrick's patients and again in 100 per cent of the cases presently reviewed.

The histories of any large group of these patients show numerous instances of death resulting from slight insult to the peritoneum (i.e., abdominal paracentesis). This is readily understandable when the obstructive and connective tissue changes are considered. The peritoneum early in this disease loses its ability to defend the body from even slight infection. For this reason and the possible further dissemination of the pseudomucin from an as yet unruptured cyst or cyst locule, paracentesis is considered definitely contraindicated. In many attempts at paracentesis the pseudomucin was too thick to pass through a cannula, thus making it an unprofitable procedure were it not contraindicated for other reasons. Strassman as early as 1891<sup>8</sup> counseled against this procedure after having two patients die of peritonitis in a group of ten so treated who were suffering from this condition. To illustrate further the lack of resistance of these

damaged peritoneal surfaces, Voigt<sup>9</sup> records a death resulting from an incarcerated hernia in which the bowel was completely viable. Many cases testify to the ease with which fistulas form—fistulas of the bowel, bladder, vagina, or even a cyst locule into the bowel, as reported by Masson and Hamrick.<sup>5</sup> These authors have presented the most recent large series, thirty cases in 1930. They have followed these cases carefully and studied them thoroughly. All but one patient received x-ray therapy postoperatively. Their average for length of life after the appearance of symptoms was 4.3 years. Of seven patients with comparable lesion, the three with microscopical evidence lived an average of 10.6 months, and the remaining four without microscopic evidence of malignancy lived an average of 6.9 years. One of their patients lived twelve to thirteen years after the appearance of symptoms and underwent five operations for the removal of accumulated pseudomucin.

The terminal stages of the disease are almost always marked by extreme cachexia and the re-accumulation of the material within the peritoneum. The most common cause of death in the above series were pulmonary embolism and peritonitis.

### Therapy

It has been well recognized for over fifty years that operation offers the only hope of cure. Both ovaries should be removed and as much as possible of the gelatinous material. Wilson<sup>13</sup> recommended the copious flushing of the peritoneum with normal saline. This he maintained caused the pseudomucin to soften and partially dissolve and greatly facilitated its removal. Admittedly this recommendation made in 1913 comes from the period of the peritoneal toilet in surgery, but can it be discarded as an unsound procedure without further trial and evaluation? The survival statistics in his series of six cases compare favorably with any of the more recent statistics. Surely it cannot be argued that the flushing will disperse the material further, as it is too well known that after the rupture of even a small cyst this tenacious substance is commonly found in the region of the diaphragm. It would seem reasonable to try the saline lavage as the removal with gloved hand, suction, or sponge is admittedly unsatisfactory. Furthermore, anything approaching complete removal must certainly more nearly approximate an

unavoidable residual that can successfully be handled by the peritoneum without irreparably damaging it. In any case where there has been peritoneal soiling by pseudomucin, even though its removal appears complete, experienced workers will give but a guarded prognosis, as even very late recurrence is possible.

Although mucoid tissue is known to be very radioresistant, an occasional case seems to be favorably affected by x-ray. This is sufficient to justify its general use in a condition otherwise so generally characterized by recurrence.

### Case Reports

*Case 1.*—Mrs. E. L., a thirty-eight-year-old white widow, born in Poland, was first admitted to the hospital on August 17, 1941, complaining of enlargement of her lower abdomen for the last three weeks. Her husband had suddenly died nine weeks previously, and since then she had felt unable to eat any solid food—subsisting mostly on coffee and fluids. There had been no nausea or vomiting. Occasionally there was a dull aching in the lower left quadrant. There were no bowel or urinary symptoms. The menses were regular—twenty-eight-day cycle with a four to five day flow. The physical examination was essentially negative except for the symmetrical lower abdominal enlargement. Resistance was slightly greater on the left, and there were indefinite signs of a cyst.

At laparotomy a ruptured pseudomucinous cystoma of the left ovary was found and removed, with much additional spillage of the mucinous material into the abdomen, which already showed definite thickening of the parietal peritoneum and "frosting" of the intestines. A bilateral salpingo-oophorectomy and supracervical hysterectomy was then performed. The appendix had at its tip a cystic mass which measured 6 cm. in diameter. The appendix was removed.

The pathologist reported: (1) multilocular pseudomucinous nonpapillary cystadenocarcinoma of the left ovary (malignancy grade 1), (2) pseudomyxoma peritonei with carcinomatous implant on the right ovary, (3) mucocele of appendix with adenocarcinoma (grade 1), (4) hyperplastic persistent proliferative endometrium, (5) normal myometrium, (6) normal fallopian tubes.

The patient was given deep radiation therapy and discharged improved on the eighteenth postoperative day.

She was readmitted in January, 1942, with severe pain in her right shoulder. There was a history of weight loss. The diagnosis of subdeltoid bursitis was made and no evidence of metastases could be found.

Her last admission was on December 18, 1942, at which time a moderate degree of ascites was present. Cachexia was evident. She complained of pain in the left knee following a fall. The diagnosis of traumatic arthritis of the left knee was made and the patient was discharged in poor condition. She was reported as deceased a few weeks after having gone home.

*Case 2.*—Mrs. S. C., a sixty-one-year-old widow, was first admitted on February 22, 1936, at which time she complained of leukorrhea and vulvar irritation of about two months' duration. She had experienced an uneventful menopause about fifteen years previously and had noticed no spotting or other disturbance until the onset of her present illness. On the day of her admission she was examined under anesthesia and a dilatation and curettage performed. No tissue was obtained. The uterus was found to be markedly retroverted and to contain a fibroid. She was discharged in good condition on February 24.

She was readmitted on November 2, 1940, this time complaining of gradual enlargement of the lower abdomen for the last five months. She had noticed loss of weight and increasing constipation. There had been an unknown amount of weight loss. The bowels moved only with an enema. She had vomited everything taken by mouth for the last twenty-four hours. The lower abdomen seemed to contain fluid, by its dullness, which however was not shifting. Paracentesis with a large needle was performed and clear mucinous material aspirated.

Laparotomy was performed ten days later under spinal anesthesia and free gelatinous material was found in the peritoneal cavity from a previously ruptured cystoma of the ovary. The peritoneum was thickened and had many shaggy fibrous areas, including portions of the capsule of the liver. The intestines were sufficiently adherent to the cystoma wall so that it could not be completely removed. The right ovary from which the cystoma had originated was removed.

The pathologist reported: (1) unilocular pseudomucinous nonpapillary cystadenoma of the right ovary with rupture and pseudomyxoma peritonei, (2) dermoid cyst of the right ovary.

The patient received a course of deep x-ray therapy and was discharged home considerably improved on December 3, 1940.

She was again readmitted on September 16, 1942, this time complaining of urinary incontinence which had developed gradually in the last six months. She also had noticed the appearance of a mass in the left lower quadrant.

Laparotomy was again performed, and upon incising the peritoneum the adherent and much elevated bladder was accidentally opened. This was repaired and with difficulty a large cystoma of the left ovary was freed from the intestines and removed after accidental rupture. The uterus was also removed and as much as possible of the pseudomucin. The peritoneum of the upper abdomen had regained a normal smooth appearance, including the previously observed involved areas over the surface of the liver. The patient was voiding normally and quite comfortable when she was discharged home on September 29.

She was readmitted on January 26, 1943, with recurrence of her urinary incontinence. She had noticed also increasing constipation. A pelvic examination at this time revealed a cystic mass in the pouch of Douglas, and a cul-de-sac puncture was performed. Considerable thick mucoid material was obtained. The urinary and



bowel functions were improved and she was discharged home again on January 30.

Her last admission was on September 24, 1946, at which time she was found to have vesicovaginal and rectovaginal fistulas. Cachexia was advanced, and she was disoriented much of the time. Surgical intervention was not felt to be indicated in her nearly terminal condition, and so after a week of supportive treatment she was sent home by ambulance and expired a short time later.

*Case 3.*—Mrs. G. L., a thirty-nine-year-old white married woman, a nurse, was first admitted on April 2, 1937, with the chief complaint of gradual enlargement of the lower abdomen. With the onset of this condition she had noticed slight epigastric and right upper quadrant distress particularly after eating. Menstruation had continued normally.

At laparotomy the peritoneum was found to be greatly thickened and contained considerable straw-colored fluid, with which was intermingled a great deal of thick mucoid material. There were bilateral ovarian cystomata—the right, the size of a football, and the left, the size of a grapefruit. They ruptured very easily upon touching and more gelatinous substance was added to that already in the peritoneal cavity. A bilateral salpingo-oophorectomy and supravaginal hysterectomy were performed. As much as possible of the fluid and pseudomucin was removed from the peritoneum before closing.

The pathologist reported: (1) multilocular pseudomucinous bilateral cystadenomata of the ovaries (benign), (2) pseudomyxoma peritonei and chronic fibrous peritonitis, (3) hyperplastic endometrium in secretory phase, (4) mild chronic cervicitis, (5) essentially normal uterus and tubes.

Patient was discharged home improved on April 14, 1937.

She was readmitted on September 17, 1938, with typical clinical and laboratory findings of cholelithiasis and acute cholecystitis. She was operated upon the next day and thickened and edematous gall bladder removed which contained three large calculi. The peritoneum appeared somewhat thickened but otherwise there was no evidence of the former ovarian tumor or of the pseudomyxoma peritonei.

Her last admission was on March 3, 1947, at which time her complaint was abdominal distention that had been gradually progressive for the last year. For about six months she felt that there had been an indefinite mass in the right lower quadrant. Examination revealed a moderately distended abdomen with slight bulging in the flanks and indefinite sensation of cystic masses low and bilaterally.

At laparotomy the thickened peritoneum was opened to reveal multiple small papillary nodules studding the parietal and the visceral surfaces. A large amount of yellowish pseudomucin was evacuated and a biopsy of the parietal peritoneum was taken. The surface of the liver was smooth and the stomach was palpably normal. The peritoneal nodularity extended into the pelvis.

The pathologist reported: (1) 2,635 c.c. of slightly bloody mucinous material. (2) implantation metastases

of pseudomucinous cystadenoma on the peritoneum with pseudomyxoma peritonei.

The patient has continued in fairly good health and was moderately active in September, 1947. This patient received deep radiation therapy for the first time on March 7, 1947.

### Discussion of Cases

1. The patient in Case 1, with microscopic evidence of malignancy, lived about eighteen months, compared with Masson and Hamrick's average<sup>5</sup> of 10.6 months. This was cystadenocarcinoma of the ovary, malignancy (grade 1). A mucocele of the appendix also revealed grade 1 adenocarcinoma.

2. The second patient lived about seven years, as compared to Masson and Hamrick's over-all average of 4.3 years and 6.9 years for cases with no microscopic evidence of malignancy. It is interesting in this case to observe the formation terminally of multiple fistulas as the peritoneum and eventually the entire walls of the hollow viscera lose their resistance and viability.

3. The third patient is in fair health almost eleven years after the first symptoms. It is possible that she may survive as long as Masson and Hamrick's twelve to thirteen year record case. Pfannenstiel<sup>7</sup> records a case that survived seventeen years.

The cholelithiasis, as it occurred in Case 3, is for some as yet unexplained reason, particularly common in these patients. This is evident by its occurrence in five of the thirty cases reported by Masson and Hamrick. The coexistence of dermoids and pseudomucinous cystomas is not uncommon, having been observed frequently by many authors.

### Summary

A brief review of the literature of pseudomyxoma peritonei has been made.

With the exception of deep radiation therapy, which is of questionable value, there has been little change in either the understanding or the treatment of this condition in over fifty years.

Copious irrigation of the peritoneum with normal saline was highly regarded as an adjunct to the mechanical removal of the pseudomucin. That this method has not been in use since 1913 does not seem reasonable because our present methods of removal are not satisfactory. Complete removal is desirable and may favorably affect the prognosis. Danger of dispersion of the pseudomucin is felt to

(Continued on Page 337)

# Granulosa Cell Carcinoma of the Ovary

## With Long-Delayed Metastasis

By Donald C. Beaver, M.D., and

Arthur W. Eckhous, M.D.

Detroit, Michigan

THE CASE to be presented is primarily of clinical interest because of (1) the long history of the neoplasm prior to operation, (2) the long period which elapsed after surgical removal of the original granulosa cell carcinoma without evidence of metastasis, and (3) the slowly developing metastasis since operation. The total duration of the carcinoma according to the history based on menstrual disturbances and pelvic mass was twenty-two years. A period of sixteen years has elapsed since surgical removal of the carcinoma. In this period of time there have been two operations for pelvic and abdominal recurrences, one twelve years and the other sixteen years after primary oophorectomy for the carcinoma. Even after this long duration the patient has remained in good health and is working daily. She was forty-six years of age at the time of her first operation in 1932, and at the time of her last operation for metastasis in 1948 she was sixty-two years of age.

Attention should also be directed to the histopathology of the neoplasm since it reaffirms the contention of many that the theca cell tumor and the granulosa cell tumor have a common histogenesis. Microscopic studies of the first metastasis disclose in some microscopic sections a sarcomatous pattern, which suggests a thecal derivation; whereas in more complete studies of the tumor from other areas, well-differentiated folliculoid and trabecular formations are found, suggesting a granulosa cell derivation. The significance of this finding will be elaborated further in the discussion of the case.

### Case Report

A white woman, aged forty-six, gravida 0, was admitted to the hospital on the surgical service of Dr. Charles Lakoff on July 31, 1932, complaining of lower abdominal pain and enlargement of the abdomen of about two years' duration. The patient stated that for the last six years she had noted that her periods were

very scanty and frequently absent. Two years ago she had an attack of fairly sharp lower abdominal pain, not associated with nausea or vomiting, that lasted about two weeks and was relieved by treatment with "ovarian extract." It was at this time that the patient noted a small hard mass in the lower abdomen.

Periods returned to normal, twenty-eight-day cycle x four, shortly after pain subsided and remained that way until about ten months before admission (1932) when she began having menorrhagia, one episode of which lasted six weeks. The abdominal mass had been growing slowly until ten months previously, when it began enlarging fairly rapidly. There had been no weight loss and, except for occasional lower abdominal pain, the patient was in good health.

On admission, the hemoglobin was 98 per cent by the Sahli method; red blood count, 4,700,000 per cu. mm., white blood count, 10,650 per cu. mm.; neutrophilic leukocytes, 68 per cent. Urinalysis was negative.

The abdomen was enlarged, and a tumor mass that seemed to arise in the pelvis and extend to the umbilicus was noted. It was hard, smooth, nontender, and only slightly movable.

On August 1, 1932, a laparotomy was performed and a large multilocular cyst of the left ovary was removed. The cyst walls were smooth, and there were no adhesions to any of the other structures.

*Macroscopic Examination.*—The specimen was a cystic mass 20 by 30 by 12 cm. Many of the cysts were filled with a clear amber fluid, and a few contained blood. The interstitial tissue contained large xanthomatous areas.

*Microscopic Examination.*—Sections through the cyst wall revealed fibrous connective tissue infiltrated by anaplastic hyperchromatic cells which in some areas tended to form columns and acini and in others resembled the graafian follicles. The cysts were lined with cuboidal or columnar epithelial cells, sometimes in several layers, with occasional blunt papillary projections into the lumen. Mitotic figures occurred occasionally.

*Pathologic Diagnosis.*—The neoplasm at this time was diagnosed as a papillary adenocarcinoma but suggested that the presence of folliclelike areas were like those seen in malignant folliculomas.

These sections were subsequently reviewed, and, in the light of more adequate knowledge of the histopathology of granulosa cell carcinoma, the diagnosis was established as a well-differentiated granulosa cell carcinoma, folliculoid pattern (Fig. 1).

The patient had an uneventful convalescence and was discharged on August 13, 1932.

She apparently got along fairly well until 1944, when she was admitted on August 1 with a chief complaint of lower abdominal pain for the past four years. Patient had not menstruated for the past eleven years.

Physical examination at this time was essentially negative except for a fairly large tender mass that reached almost to the umbilicus. Laparotomy on August 5 revealed a large soft mass, about 17 cm. in diameter, in-

From the Department of Pathology, Woman's Hospital, Detroit. Dr. Eckhous is The Resident in Obstetrics and Gynecology.



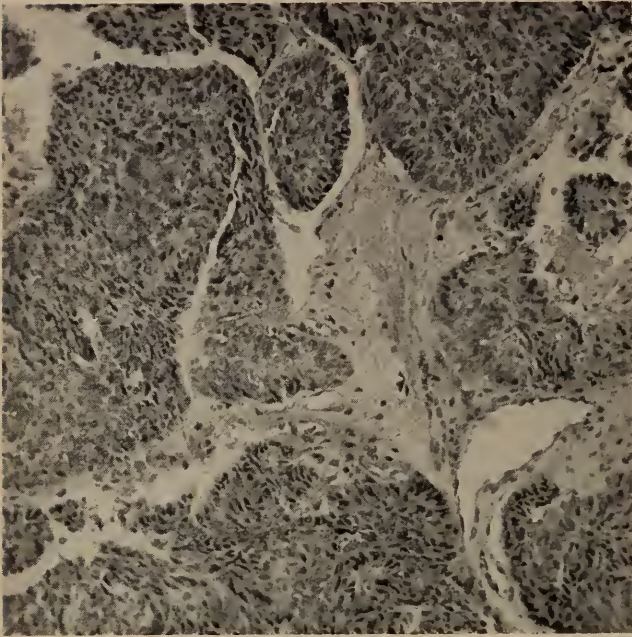


Fig. 1. Microscopic appearance of the primary granulosa cell carcinoma of the left ovary, at the first operation in 1932. Differentiation corresponds to the homogeneous mature, solid and folliculoid varieties. (H and E stain  $\times 125$ ).

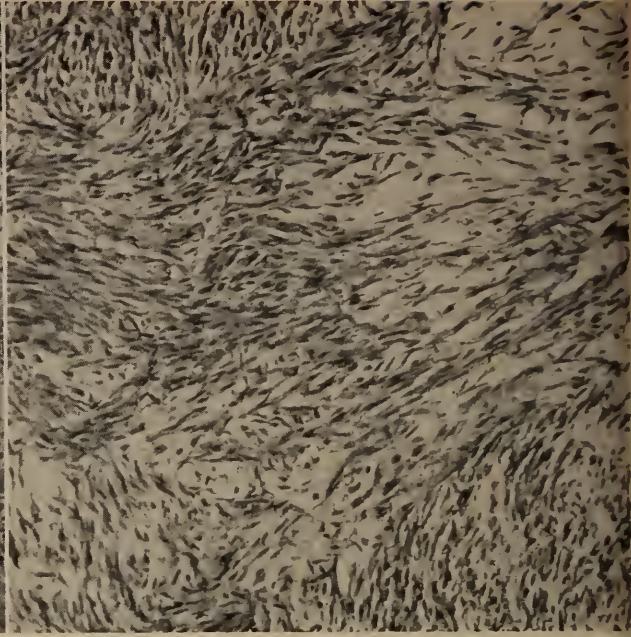


Fig. 2. Microscopic appearance of the tumor from first metastasis in 1944. In this area differentiation corresponds with the homogeneous immature variety. The pattern is mesenchymatous, with theca-like or sarcomatous-like areas present (H and E stain  $\times 150$ ).

volving the surrounding adnexae. The tumor was removed widely.

**Macroscopic Examination.**—Disclosed a lobulated tumor mass 17 cm. in diameter. The lobules varied up to 6 cm. in diameter. The largest ones were encapsulated and contained fluid blood. The smaller lobules appeared to be composed of homogeneous encephaloid yellow tissue. There were no areas of normal ovarian tissue found.

**Microscopic Examination.**—Sections revealed a highly cellular neoplasm composed of anaplastic spindle shaped cells, with large hyperchromic nuclei arranged in alveolar form, frequently with mitotic figures. The early impression, without knowing anything of the history of this case, was that we were dealing with a sarcoma, possibly originating in the uterus or ovary. When the history of the case was reviewed, additional sections of the tumor were taken which revealed a poorly differentiated folliculoid and trabecular pattern with much of the tumor being composed of a diffuse granulosa cell arrangement. It appears, then, that the neoplasm at this time represented pelvic and peritoneal metastasis of the primary granulosa cell carcinoma with two types of differentiation, one resembling immature granulosa cells and the other resembling immature and anaplastic theca cells.

**Pathologic Diagnosis.**—Metastatic granulosa cell carcinoma, folliculoid and trabecular pattern with sarcomatous-thecal differentiation (Figs. 2 and 3).

The patient had a fairly difficult postoperative course, with temperature up to  $104^{\circ}$  and persistent abdominal distention that required treatment with Miller-Abbott tube and suction. The patient was discharged on August 27 and shortly thereafter received a course of twenty-four x-ray treatments, totalling 6,800 r.

The patient returned to her secretarial position.

She was again admitted on July 27, 1948, now aged sixty-two. She stated that she hadn't felt well since her previous operation in 1944, and that she had a feeling of fullness in the abdomen and always felt tired. She had also noticed that her abdomen had been gradually increasing in size, and complained of fairly marked constipation for the last two years. There had been no weight loss.

During the last two months, she had had some vaginal bleeding that varied from spotting to profuse bleeding.

The physical examination was essentially negative except for a large, firm, tender mass in the lower abdomen that extended to the level of the umbilicus.

On July 30, 1948, laparotomy revealed a large necrotic bleeding pelvic mass that involved the uterus and right ovary. There were numerous extensions to the peritoneum and the omentum. As much of the mass as possible was resected. The patient had an uneventful postoperative course that was followed by a course of deep x-ray, amounting to 6,800 r.

**Macroscopic Examination.**—The specimen consisted of four segments of tissue, the largest measuring 8 by 7 by 6 cm. There were cystic areas measuring up to 2 cm. in diameter present, which contained hemorrhagic fluid. Sections of the solid areas gave the appearance of collapsed cysts.

**Microscopic Examination.**—Section revealed a neoplasm composed of small cells with hyperchromatic nuclei. The cells were arranged in solid masses with a folliculoid and trabecular pattern. Many Call-Exner bodies were identified. Other areas contained small cysts which accentuated the folliculoid pattern.





Fig. 3. Same as Figure 2, but revealing patterns suggesting mature trabecular (below) and immature trabecular (above), connected with the adjacent stroma. Other areas reveal a poorly defined folliculoid pattern (H and E stain  $\times 125$ ).

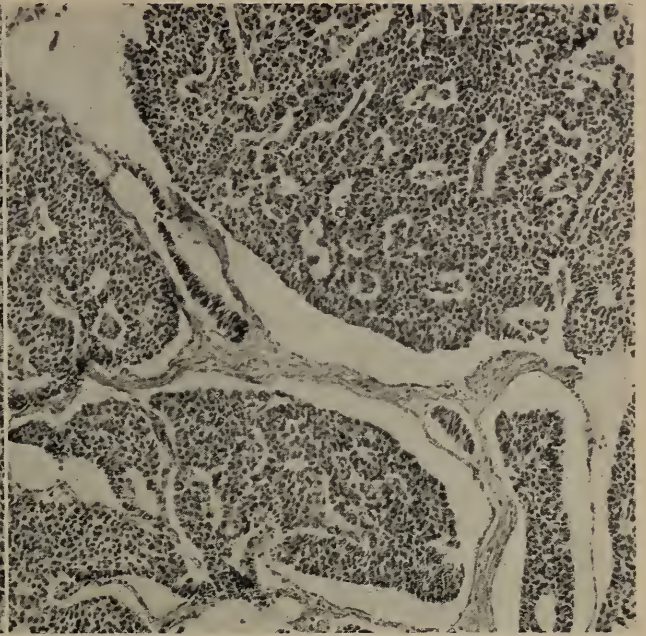


Fig. 4. Microscopic appearance of the tumor from last metastasis, in 1948. Differentiation here has proceeded along lines of mature trabecular with cylindromatous cords. Folliculoid formations are also present but ill defined (H and E stain  $\times 125$ ).

**Pathologic Diagnosis.**—Metastatic granulosa cell carcinoma of the right ovary, omentum, and peritoneum (Fig. 4). The possibility of the tumor at this time being a new primary in the right ovary was also considered, but the evidence of previous and present metastasis to the peritoneum and omentum gave weight to the idea that the right ovarian involvement was also metastatic from the former left ovarian primary growth.

### Discussion

Granulosa cell carcinoma comprises about 10 per cent of all solid primary ovarian carcinomas. No age group is exempt, cases having been reported in both extremes of life. Selye<sup>7</sup> reports the occurrence in an infant fourteen weeks of age and in a woman ninety-two years of age. From 46 to 70 per cent of the tumors occur before or during the menopause and from 30 to 48 per cent after the menopause, according to various reports in the literature. Approximately 5 per cent occur in girls before puberty. The characteristic symptomatology is correlated with the elaboration of estrogenic hormone from the tumor, which may occur either before the time of normal ovarian functional activity, after such activity should have ceased, or as an excessive manifestation of estrogenic activity during active sexual life. Thus, before puberty, the chief symptoms produced are related to precocious or pseudopubertal sexual development. After menopause the symptoms relate to the return of uterine bleeding and are asso-

ciated with hypertrophic persistent proliferative phase endometrium of the "swiss cheese" type. During active sexual life the symptoms are usually less dramatic and are referred to irregularities of menstruation or excessive uterine bleeding. Periods of amenorrhea alternating with periods of metrorrhagia may occur. Both may be prolonged.

The degree of malignancy of granulosa cell carcinoma is not high. However, sufficient information is now at hand to indicate that all such neoplasms are in reality malignant even though the majority of the tumors have a benign clinical course after surgical extirpation. Frequently there is a very long interval between the appearance of the primary neoplasm and evidences of metastasis. This, no doubt, accounts for the usually benign clinical course. According to Schiller<sup>6</sup> at least 70 to 80 per cent of the tumors follow a benign course. Novak and Brawner<sup>5</sup> found the malignancy rate in a follow-up of thirty-two cases to be 28.1 per cent. The report of Hodgson, Dockerty, and Mussey<sup>2</sup> found the rate of recurrence to be between 6.4 and 8 per cent. The appearance of metastasis or recurrence rarely may be very rapid as in the patient reported by Novak,<sup>4</sup> in whom extensive peritoneal recurrence was observed within three months after radical operation was done. On the other hand, recurrence or metastasis may be delayed many years after the tumor is surgically removed. Jones and TeLinde<sup>3</sup> re-



ported three cases exhibiting such delayed metastasis. All three patients were apparently well and healthy for at least fifteen years, but all died of metastasis eighteen, twenty, and twenty-one years, respectively, after the original operation.

The case herein reported similarly demonstrates the uncertainty of the prognosis. It is apparent that five and ten year follow-up periods are inadequate to establish that there will eventually be no metastasis. The duration of the granulosa cell carcinoma in our case was twenty-two years, if we allow for the six years of symptoms prior to operation in which there were evidences of menstrual disturbances and the eventual appearance of a pelvic mass. Twelve years elapsed after surgical removal of the primary growth before metastasis was sufficiently evident to cause the patient to return for operation. Following this another four years elapsed before metastasis was again evident—a total of sixteen years following surgical operation for the primary neoplasm.

The patient remained in sufficiently good health to permit maintenance of her occupation during the four years or more when there was known evidence of metastasis. She is still alive.

When there is long-delayed metastasis after surgical removal of the primary, such as exhibited by our patient and by the three patients of Jones and TeLinde,<sup>3</sup> the possibility arises that the apparent metastasis is, in reality, a new primary tumor rather than metastasis from a former neoplasm. It is possible that new neoplasms could develop in extra-ovarian positions from misplaced anlagen of ovarian tissue or from the opposite ovary. The latter possibility must be considered in our case since at the third operative procedure (the second for metastasis), the opposite ovary was involved. Opposed to this consideration is the finding of metastasis four years before, at which time there was no visible evidence of involvement of this ovary.

The clinical course in our patient argues for more radical procedures than originally recommended for granulosa cell carcinoma. If a radical operation had been performed early, it is possible that no further trouble would have been experienced. The low rate of metastasis, usually observed, even after simple extirpation of the involved ovary, would still favor conservative procedures in girls or young women. In the older age group, such conservatism could hardly be justified.

Schiller<sup>6</sup> classified granulosa cell carcinoma of the ovary into four microscopic varieties, as follows: (1) homogeneous immature (sarcomatous in appearance), (2) trabecular (cylindromatous) (mature or immature type), (3) homogeneous mature (folliculoid form), and (4) luteinoma (luteoma) (controversial). Frequently two or all three types of granulosa cell carcinoma can be found in a single tumor. Our case exemplifies this point, since at various periods, and in various blocks of tissue, the tumor revealed trabecular immature and mature, homogeneous immature, with sarcomatous pattern, and homogeneous mature, with folliculoid forms. These various morphologic characteristics occurring in the same tumor are understood if we accept the work of Fischel,<sup>1</sup> which traces the granulosa development from the ovarian mesenchyme. It thus explains why there may be microscopic variations ranging from sarcomatous to folliculoid patterns, and explains the confusion in nomenclature.

It is usually impossible to distinguish the degree of malignancy of granulosa cell tumors, by the histologic pattern, whether of the immature or mature types. This leads to the assumption that all such tumors are inherently malignant, and, if given sufficient time, evidences of clinical malignancy would be expressed by metastasis. The microscopic appearances of the various tumors in the present case are no different than those observed in many other cases in which a benign clinical course resulted.

### Summary

A case of granulosa cell carcinoma has been reported in which there has been clinical evidence of the existence of the tumor for twenty-two years, and in which metastasis became evident, requiring surgical interference, twelve and sixteen years after the primary granulosa cell carcinoma was surgically removed. The patient is still living—six months since the last operation for metastasis.

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# Acute Glomerulonephritis

## Observations in Fifty-three Children

By Ilse Gorbach, M.D.  
Detroit, Michigan

**S**TUDIES by numerous investigators, especially in the past three decades, have placed increasing emphasis on the extra-renal aspects of acute glomerulonephritis.

Various aspects of its pathologic physiology are not entirely explained, and the anatomic characteristics of organs other than the kidney have not been presented clearly or consistently. Yet, clinical observations have supported the concept that edema as well as cardiac and cerebral manifestations are part of a universal vascular lesion rather than complications of the renal disease.

However, the diagnosis of acute glomerulonephritis still rests to a great extent on hematuria, and renal lesions seen postmortem are generally pathognomonic, so that the kidney is probably the main "shock organ" in this process of essentially unproved etiology. Evidence available probably warrants the inclusion of acute glomerulonephritis in a group of diseases with etiologic basis in hypersensitivity to streptococci or other organisms. Support for this concept lies in the following observations:

1. A primary infection, usually respiratory, precedes these diseases.
2. There is a latent period of one to three weeks before appearance of nephritic and other manifestations.
3. The symptom complex usually cannot be explained by dysfunction of a single organ.

In children acute glomerulonephritis presents special problems. The prognosis is usually good, despite an often severe acute course. The subjective symptoms are frequently difficult to elicit, and objective evidence may be overlooked.

It was felt that by analysis of manifestations of acute glomerulonephritis in a number of children a more concise picture would result than would be obvious from isolated observations. Burke and Ross published a general review of ninety similar cases in 1947. Rubin and Rapaport observed fifty-

five pediatric cases of acute glomerulonephritis (1932-1936) and placed special emphasis on cardiac manifestations. Murphy and Rastetter included a group of children under ten years of age in their report. Our presentation comprises a study of fifty-three cases, aged four months to twelve years, that were discharged with a diagnosis of acute glomerulonephritis from the Children's Hospital of Michigan in the years 1944-1947. No attempt was made to correlate any findings with prognosis, although most of our cases were followed and have shown no sign of the disease either on discharge from the hospital or on monthly followup visits for at least three months. The diagnostic criteria for the acute disease included hematuria and albuminuria (in all our cases by definition). At least one other manifestation was found in each case and special attention was paid to edema, hypertension, azotemia, associated cardiac and cerebral symptoms. In one case, however, the diagnosis was based entirely on the autopsy findings and this will be presented now.

*Case 1.*—(No. 53) T. S., a four-months-old-white boy, was admitted in September, 1946, because of convulsions. He had been restless and feverish for three weeks. During the week before admission he had anorexia and frequent vomiting. In spite of this he did not appear to have lost weight. Several hours before admission a generalized convulsion had occurred, lasting about half an hour. It was also observed that the child had not voided for twenty hours previously. Past history was not significant. Development had been normal, and one week before admission the weight was 13½ pounds. Physical examination showed a pale, moderately well-nourished infant weighing 14½ pounds. Temperature was 99.6° F. and blood pressure 80/60. The child was listless and his respirations were grunting in character. The ears, nose and throat were essentially negative; eye-grounds were barely visualized but thought to be normal; the neck was supple; the lungs were clear. The heart sounds were of poor quality, but the organ was not thought to be enlarged clinically. The liver could be felt two finger-breadths below the costal margin, and the tip of the spleen was palpable. Reflexes were physiological. *Laboratory work:* Urine was not obtained ante mortem. Hemoglobin was 4.8 grams; red blood cells 2.9 million; the differential was within normal limits. Spinal fluid was normal. Blood Mazzini test was negative. Chest x-ray showed accentuated hilar pulmonary markings. Electrocardiogram was interpreted to show "impaired myocardial nutrition."

Provisional diagnosis was anemia and possible sinus thrombosis. *Hospital course:* The infant had repeated convulsions, described as slight and generalized, for which he received paraldehyde. Oxygen was administered and 5 c.c. of blood per pound of body weight were

From the Children's Hospital of Michigan and the Department of Pediatrics, Wayne University College of Medicine, Detroit. Dr. Gorbach is Resident in Pediatrics.



given by slow intravenous drip. The child expired twelve hours after admission when the convulsions had become more severe and prolonged, and heart tones had gradually decreased in intensity.

action had been described clinically as weak, and on postmortem examination the heart showed severe involvement. This may be partially attrib-

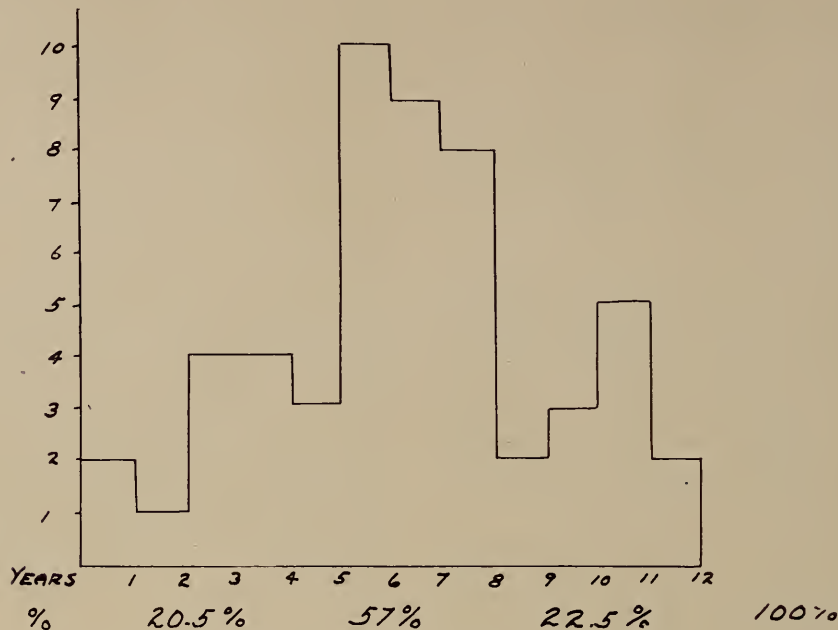


Fig. 1. Age distribution of 53 patients with acute glomerulonephritis at the Children's Hospital of Michigan, 1944-1947.

*Postmortem findings* (Dr. W. W. Zuelzer): The organs were found to be normal except for the following:

1. The kidneys were markedly enlarged, about two and a half times normal weight. There were no anatomic abnormalities in the pelves, ureters, or the bladder. The parenchymas of both kidneys were mottled in the arcuate zones and there was some congestion noted grossly in the pyramidal tips. Microscopically the capillary loops of the glomeruli were filled with proliferated endothelial cells, and there was spreading of the basement membrane.

2. The heart was enlarged and pale and weighed 44 grams instead of the expected normal of 27 grams.

3. The brain showed edema, but was otherwise negative.

There was no definite evidence of preceding bacterial infection. On the basis of characteristic anatomical kidney findings, the diagnosis of acute and subacute glomerulonephritis was made postmortem.

Case No. 53, just presented, was the only death in the series of fifty-three children in our study, constituting a death rate of 1.9 per cent. This is comparable to a mortality of 3.3 per cent in Burke and Ross' series, 3.0 per cent reported by Rubin and Rapaport, and 11.5 per cent by Murphy and Rastetter.

The cause of death was at least partly on a cardiac basis, although during life the cerebral symptoms had been most striking. The heart

uted to severe anemia; however, in retrospect, the "nephritic component" cannot be disregarded.

#### Age

The youngest child in our series was four months old, the oldest twelve years. Sixty per cent of cases fell in the age group of four to eight years (Fig. 1), while the group below four years and that above eight years comprised about 20 per cent each.

#### Sex

In different publications, observations on sex distribution of glomerulonephritis in children show a wide range of results. In most of them, males predominate. Murphy and Rastetter give six males to one female in cases under ten years of age, while Burke and Ross show a statistically insignificant margin in favor of boys. The distribution of our series agrees with the latter findings—twenty-eight males (53 per cent) to twenty-five females (47 per cent).

#### Race

Similarly, it cannot be stated from our series that there is any difference by race in the number of children admitted to the hospital with acute glo-

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merulonephritis (Fig. 2). By numerical statement we would show a considerably higher number of whites than of colored, but when the racial makeup

were also high in incidence (11.4 per cent). It is likely that this figure is especially high in children who have more pyogenic skin infections than

GENERAL HOSPITAL POPULATION	WHITE	COLORED	W= 13335    W= 64% C= 7473    C= 36%
ACUTE NEPHRITIS	WHITE	COLORED	W= 38    W= 72% C= 15    C= 28%
%	10   20   30   40   50   60   70   80   90   100%		

Fig. 2. Proportion of white to colored patients on basis of percentage in general hospital population and in series of 53 patients with acute glomerulonephritis at Children's Hospital of Michigan, 1944-1947.

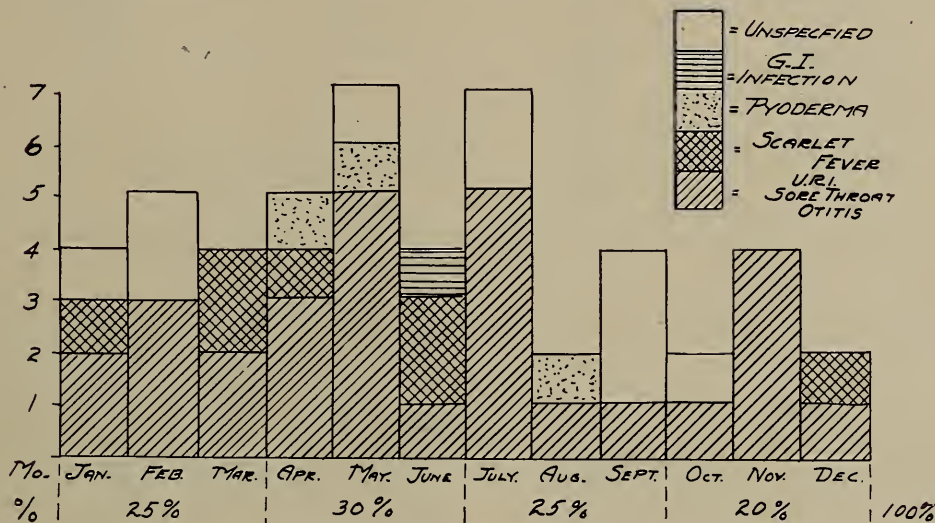


Fig. 3. Seasonal distribution of 53 cases with acute glomerulonephritis at Children's Hospital of Michigan, 1944-1947. By month of admission and antecedent infection.

of the hospital population (not corrected for age) is considered, it appears otherwise. Thus, we find that of the fifty-three cases under study only 28 per cent were colored, but this approaches the percentage of our hospital population for 1944-1947, namely, 36 per cent. Burke and Ross state the incidence in Negroes of acute glomerulonephritis in their series at 62 per cent.

## Antecedent Infections

Infections of probable etiological significance preceding the appearance of symptoms in our 53 children could be identified in all but nine cases (Table I).

The interval between the bacterial infection and the onset of symptoms was from three to forty days, with an average of two to four weeks. As seen above, by far the largest proportion of these children had respiratory infections, including scarlet fever, a total of 69.8 per cent. Skin infections

TABLE I. INFECTIONS PRECEDING THE ONSET OF ACUTE GLOMERULONEPHRITIS.

Children's Hospital of Michigan, 1944-1947

DISEASE	NUMBER	%	AVERAGE TIME (DAYS)
U.R.I.	14	26.4	16
PHARYNGITIS ADENITIS	14	26.4	16
OTITIS	2	3.8	14
SCARLET FEVER	7	13.2	28
SKIN INFECT.	6	11.4	14
G.I. INFECT.	1	1.9	
UNSPECIFIED	9	16.9	
	53	100.0%	

adults. As the preceding infections were mild and required only home care, extensive bacterial studies



are not available. Antifibrinolysin titers were run in only two cases; both of these however gave evi-

Figure 4, and each will be discussed under separate headings.

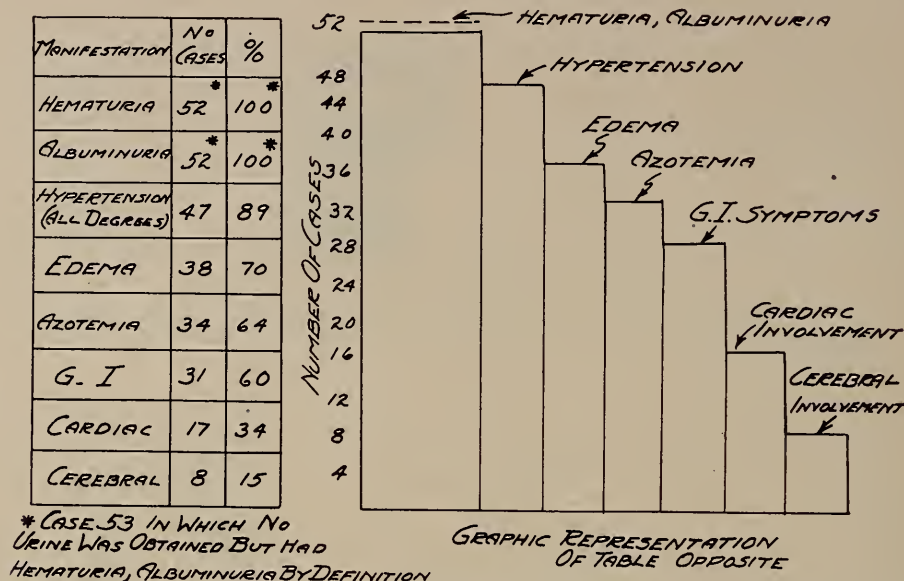


Fig. 4. Manifestations of acute glomerulonephritis observed in 53 cases at Children's Hospital of Michigan, 1944-1947.

dence that the child may have had a recent streptococcal infection.

### Season

In this connection we have grouped our cases with acute glomerulonephritis from 1944-1947 by month of hospital admission, disregarding the individual year. This showed a distribution of cases somewhat different than would be expected from the seasonal epidemiology of the preceding infections (Fig. 3).

Thus, July had as high a number of admissions as May and November, but late winter and spring months showed admission figures consistently higher.

Upper respiratory infection was the antecedent disease most frequently quoted, regardless of season. The larger number of cases with preceding scarlet fever fell in the first half of the year. Incidentally, the number of admissions in the July months of 1944-1947 show a surprisingly high number with upper respiratory infections. It is thought, however, that this observation may have been influenced by the inclusion of "epidemic years" in which the number of summer respiratory infections was higher than usually expected.

### Clinical Manifestations

The signs and symptoms most frequently noted in the fifty-three cases under study are shown in

Those manifestations cited as chief complaints show that more than 50 per cent of the children were brought to the hospital with "swelling," about 20 per cent with grossly manifest hematuria, 13 per cent with convulsions, and only 2 per cent with symptoms referable to the child's cardiac status.

Fever was infrequently present in both history and hospital observation and was usually accounted for by infections not necessarily connected with the disease.

**Hypertension.**—This is one of the most dramatic phenomena of acute nephritis. As blood pressure readings are comparatively difficult to obtain in small children, their value is frequently ignored. Thus, an important index to the severity of the disease, from a clinical though not necessarily prognostic standpoint, is overlooked.

It seems to us that proper evaluation of hypertension is often hampered by failure to consider that normal blood pressure in children varies with age, the adult level being approached at puberty. Furthermore, it is generally accepted that the abnormal elevation of the diastolic pressure rather than that of the systolic is the essential criterion. In the literature reviewed the systolic value is used as standard. Burke and Ross regarded a systolic pressure above 120 mm. Hg as "significant hypertension," although they recognize that in young children, particularly those under the age of five

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TABLE II. STANDARD OF ARTERIAL PRESSURE VALUES  
AS ADAPTED FROM COMPOSITE OBSERVATIONS.  
(From Taussig and Hecht and from Brenneman)

AGE	SYSTOLIC	DIASTOLIC	RANGE USED IN SERIES	PULSE PRESSURE INT. MM. HG.
NEWBORN	55	40	55/40	
UNDER 4 YEARS	80	50	80/50	30
4 YEARS	80-90	55-60	90/60	30
6 YEARS	85-95	55-65	95/65	30
8 YEARS	88-100	58-68	100/68	32
10 YEARS	95-110	60-70	110/70	40
12 YEARS	102-115	62-72	115/72	43
14 YEARS	104-124	65-78	124/78	46

years, a systolic pressure of 120 may well constitute hypertension. Rubin and Rapaport, commenting on Levy's observation that significant blood pressure elevation was absent in some cases of heart failure during acute hemorrhagic nephritis, point out that caution must be exercised in evaluating isolated readings of blood pressure in children. They do not state their accepted standards, but observe that frequently a blood pressure apparently normal at time of admission to the hospital was really elevated in comparison to the pressure obtained when the child was entirely well. These normal values, obtained chiefly by serial observations, are generally moderately high by Taussig's standards which were set up from composite observations of other investigators.

The analysis of our fifty-three cases has directed our attention to the fact that the diastolic pressure can well be used in evaluating hypertension in children. The systolic pressure often rises markedly with excitement while the diastolic shows a lag. A crying child is apt to show this phenomenon.

With these factors in mind we have based our definition of hypertension in children on the degree of elevation of the diastolic pressure above the upper limit of normal as quoted by Taussig and Hecht for the age groups above four years (Table II). For the younger age groups figures were adapted from Grulee and Sanford.

We have also taken into consideration the value of serial readings, as emphasized by Rubin and Rapaport, and arrived at the following criteria:

1. Hypertension is marked if the diastolic pressure approaches the normal systolic pressure by

more than half the pulse pressure value. Thus, for a four-year-old child with a normal pressure of 90/60, a diastolic pressure of more than 75 mm. Hg is regarded as indicative of marked hypertension.

2. Hypertension is moderate if the diastolic pressure approaches the half way mark of the pulse pressure.

3. Hypertension is mild if the diastolic is considerably above normal, but not more than by 25 per cent of the pulse pressure value. In this way the data in Table III were collected.

TABLE III. HYPERTENSION IN ACUTE GLOMERULONEPHRITIS  
Children's Hospital of Michigan, 1944-1947

TYPE OF HYPERTENSION	NUMBER OF CASES	PERCENT
MARKED	38	71.8
MODERATE	5	9.5
MILD	4	7.4
NO ELEVATION	5	9.5
NONE TAKEN	1	1.8
TOTAL	53	100.0

88.7

Thus, almost 90 per cent of children with acute glomerulonephritis had hypertension of some degree, 72 per cent having marked hypertension at sometime during the disease. This figure is only slightly higher than that of Burke and Ross (81 per cent) but much higher than figures in most textbooks. The agreement of these figures despite different standards is probably due to the fact that most of the children of our series regarded as severe hypertensives were in the age group over four years with a normal systolic pressure of 90 to 100, so that an elevation to 120 mm. was often seen.

A further significant feature of hypertension in children is shown in Figure 5. The thirty-eight cases with marked elevation of blood pressure are presented according to the duration of the hypertension. Some children with marked hypertension regardless of duration showed an abrupt drop of pressure to normal and the readings remained so. Others passed through a period of moderate and/or mild hypertension before reaching the nor-



mal level. Exacerbations of marked elevation after a normal level were occasionally observed. Thus, the subsequent course of a nephritic child could

tive aspects of magnesium sulfate ascribed to relief of vasospasm in acute glomerulonephritis cannot be disregarded. Blood pressure readings taken at more

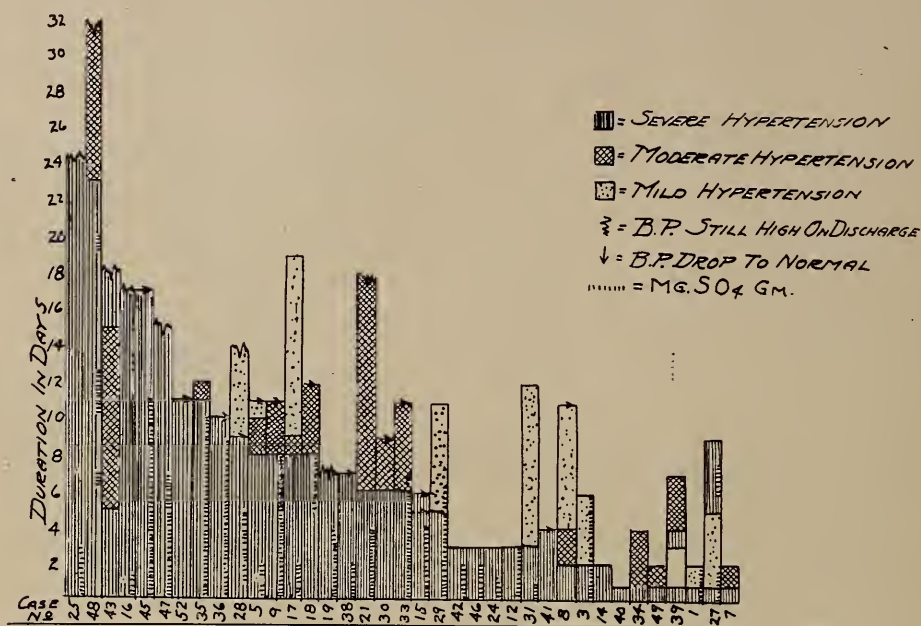


Fig. 5. Fifty-three cases of acute glomerulonephritis according to duration of marked hypertension, at Children's Hospital of Michigan, 1944-1947.

not be predicted from the duration of the severe hypertension. We realize that these blood pressure readings were noted only after the child came to the hospital and the hypertension may have been present for variable periods, but in most of our cases the presenting symptoms had not been observed longer than a few days before admission.

Further evaluation of blood pressure curves showed that certain characteristics of pulse pressure were consistent. Thirty-eight patients with marked hypertension had a pulse pressure less than normal at the time of the marked elevation of blood pressure, while those patients with moderate or mild hypertension had essentially normal pulse pressures. It is obvious from a daily tabulation of pressures that as a patient passes from marked hypertension to a moderate or mild degree, his pulse pressure becomes wider.

Most children received magnesium sulfate intramuscularly in doses of 0.2 c.c. per pound. Occasionally this was given rather sporadically. Some cases had magnesium sulfate only by the oral route; others received none at all. From the presentation on the chart it appears that relief of hypertension by magnesium sulfate was rarely dramatic and usually not lasting. However, the pallia-

rious frequent intervals during treatment with adequate dose of the drug consistently show a prompt though often only a temporary drop in systolic and diastolic readings. The subject has been extensively treated elsewhere and further discussion is beyond the scope of this paper.

*Cardiac Manifestations.*—Seventeen patients in this series (32 per cent) had signs or symptoms of cardiac involvement by the following criteria: (1) clinically—dyspnea; (2) by x-ray findings (positive for cardiac enlargement or pulmonary congestion); (3) by electrocardiogram findings.

With similar criteria Rubin had found fourteen cases of cardiac involvement in a series of fifty-five patients, eleven (20 per cent) showing definite dyspnea referable to the cardiac status. Only five of our cases were definitely described as dyspneic. The cardiac symptoms are often insidious and are recognized chiefly in proportion to the care and acuity with which they are sought. However, x-rays were taken in fourteen of the seventeen cases with established cardiac involvement. Eleven of these showed evidence of pulmonary congestion, so that by the criteria of clinical as well as x-ray findings, slightly more than 20 per cent of our cases also showed cardiac failure.

Rubin and Rapaport found hypertension present in all fourteen cases with cardiac involvement in their series, and concluded that "whether or not heart failure results, therefore, is dependent on two factors—the extent of the myocardial damage and the degree of hypertension."

On the other hand, Levy (1930), as well as Murphy, Gill and Moxon (1934) reported cases with cardiac failure in acute glomerulonephritis without significant elevation of pressure. In our study, sixteen out of seventeen cases with cardiac involvement had severe hypertension. Yet, the majority of patients (60 per cent) with severe hypertension showed no cardiac involvement. According to Rubin and Rapaport, quoted above, this should indicate that the myocardium was not affected severely enough to weaken under the increased stress of increased peripheral resistance.

It is to be noted in this respect that one case had definite electrocardiogram changes indicative of myocardial damage and left axis deviation, but showed neither clinical or radiologic evidence of cardiac failure at that time.

In agreement with others we can conclude from our series that there is at least one factor, myocardial involvement, in addition to the hypertension necessary in the production of cardiac failure, but the quantitative relationship of these is not evident from the study at hand.

Cardiac involvement may be more accurately evaluated in acute glomerulonephritis in children with the help of the x-ray and the electrocardiogram *even in the absence of clinical signs*.

**Cerebral Signs.**—These are often explained on the basis of vasospasm and resulting ischemia of the central nervous system. Convulsions were present in eight cases out of fifty-three (15 per cent), all patients with severe hypertension. It was noted that of these eight children, four had a history of convulsions only; the others did have convulsions in the hospital, but, although the marked hypertension lasted from three to fourteen days, no convulsions occurred after the second day of hospitalization, and no more than two episodes were observed. Magnesium sulfate was given in all cases but one, and all patients were on bed rest.

**Edema.**—This manifestation was present in thirty-eight (72 per cent) of the children. It was the most frequent chief complaint on admission. It is interesting to note that about one-half of the patients with edema had cardiac or cerebral in-

TABLE IV. DURATION OF HEMATURIA IN RELATION TO DURATION OF HYPERTENSION

	No. of Cases	Percentage
Hematuria after blood pressure was normal	38	71.8
Hypertension after urine showed no red cells	6	11.2
Hematuria without hypertension	3	5.7
Hypertension without hematuria	0	0
Hypertension and hematuria disappearing simultaneously	4	7.5
No blood pressure taken	1	1.9
or no urine	1	3.8
Totals	53	100.0

TABLE V. DURATION OF HEMATURIA IN RELATION TO ALBUMINURIA

Urinary Findings	No. of Cases	Percentage
Albuminuria noted longer than hematuria	17	32.1
Hematuria noted longer than albuminuria	21	39.6
Hematuria and albuminuria same duration	14	26.4
No urine obtained	1	1.9
Totals	53	100.0

volvement, while only about one-seventh of the cases without edema had similar signs or symptoms. Thus, edema may have direct relationship to the severity of the disease in terms of generalized vascular involvement.

On the other hand, all but one case with cardiac symptoms fell into the group with edema. This supports the observation that cardiac failure may contribute to the anasarca, as has been insisted upon by other investigators, notably Rubin.

**Laboratory Findings.**—Manifestations of the disease in the kidneys may be evaluated in terms of nitrogen retention and by the presence of abnormal constituents in the urine.

Retention of urea was present in 64 per cent of children in this study. This observation was based on a blood urea nitrogen above 20 mg./100 ml. being considered elevated. Red cells and albumin were present in 100 per cent of the cases by definition. There seemed to be no relationship between the azotemia and degree of hematuria and albuminuria.

As stated above, the amount of the hematuria or albuminuria is no index to the gravity of the acute disease. It was noted a large number of cases had hematuria after the clinical manifestations, such as hypertension, had subsided.

Albuminuria was a constant finding in acute glomerulonephritis, and its severity could not be correlated with the degree of hematuria. The larger proportion of children had 2 to 4 plus albumin in the urine for a variable duration of time, and it was noted that about 40 per cent of them had hematuria definitely longer than the albuminuria.



### Summary

Fifty-three cases of acute glomerulonephritis in children are reviewed. There was no significant difference in the incidence of this disease by race or sex. The large number of cases were in the age group of four to eight years.

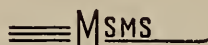
Almost 90 per cent of children were observed to have hypertension of variable duration during their acute disease. Salient features of this manifestation were discussed in detail, and the importance of standardization of blood pressure observations in children was stressed. It was noted that the pulse pressure was less than normal in these children rather than increased, as was expected at the time of marked hypertension.

Cardiac and cerebral manifestations were discussed, especially in light of the concept that acute glomerulonephritis is a generalized vascular disease.

The author expresses her appreciation to Dr. Paul V. Woolley and Dr. Ruben Meyer for their encouragement and suggestions in preparing this material and to Mr. Zinsser who constructed the graphs.

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### BLUE SHIELD PLANNING OWN BUILDING IN PENNSYLVANIA

Blue Shield in Pennsylvania, with its principal office in Harrisburg, expects to occupy a newly constructed building of its own by September 1, 1949.

Because of its rapid expansion during 1948 and the need for additional working space, it became necessary for the Plan to find new quarters in Harrisburg in order to handle its growing volume of business. Some months ago it was decided that a new building was the only answer to the problem. Accordingly, property was secured, architect's drawings prepared, and bids sought for actual construction which is expected to be completed by early fall.

## Pathological Alterations of Spinal Fluid Pressure

By Robert J. Kalthoff, M.D.

Detroit, Michigan

**R**ECENT INTEREST in cerebrospinal fluid has been centered about serological and biochemical studies to the neglect of its physiology and physiopathology. The purpose of this paper will be to discuss the physiopathology of cerebrospinal fluid, emphasizing the important mechanisms which produce alterations in spinal fluid pressure, and simple means of their determination.

### Normal Pressures

In the normal adult, lying in the lateral recumbent position with his head and pelvis level, normal spinal fluid pressure ranges from 70 to 180 mm. of water. Under similar conditions in the newborn, the pressure should lie between 40 and 80 mm. of water. In the erect position, normal adult intracranial pressure falls to a level of 50 to 150 mm. of water below atmospheric pressure while the lumbar pressure is more than doubled. The zero point lies at the lower level of the cervical vertebrae.<sup>3</sup>

### Pathological Alterations of Spinal Fluid Pressure

Factors that may alter spinal fluid pressure are (1) variations in the rate of formation, (2) variations in the rate of absorption, (3) increase or decrease in the size of the subarachnoid reservoir, and (4) blockage of cerebrospinal fluid circulation.

*Variations in the Rate of Formation.*—Cerebrospinal fluid originates mainly from the choroid plexuses<sup>4</sup> which represent vascular fingerlike folds of pia found in the third, fourth and, most prominently, the lateral ventricles. Autonomic control of the choroid plexuses has been demonstrated by Stohr. Pilocarpine, a cholinergic drug acting on this autonomic innervation, has been observed to increase the output of cerebrospinal fluid, while thyroid extract, as shown by Frazier,<sup>7</sup> is able to decrease this output.

It is interesting to note that most drugs either fail to pass the choroidal barrier or do so to such a limited extent that they reach the spinal fluid

The author is an intern at Harper Hospital.

in therapeutically ineffective quantities. The sulfonamides, penicillin and urotropin are the principal exceptions. The latter, as shown by Alajouanine,<sup>9</sup> has been utilized as a carrier to transmit salicylates through the choroidal barrier, releasing them in the spinal fluid in sufficient titers to be of therapeutic interest.

Some rare cases of internal hydrocephalus have been reported in which an increased rate of spinal fluid formation was attributed to a hypertrophy of one or both choroid plexuses. In general, however, variations in spinal fluid formation are the result of factors which act to change the normal balance existing between the capillary pressure in the choroid plexuses and the osmotic tension of blood plasma. Masserman,<sup>8</sup> on the basis of pressure measurements, found that after removal of small amounts of spinal fluid, replacement occurred at the rate of approximately 0.3 c.c. per minute (480 c.c. per twenty-four hours). Weed<sup>15</sup> has shown that this balance may be disturbed by altering the osmotic tension of the blood with the intravenous injection of either hypertonic or hypotonic solutions. The latter will of course increase the rate of spinal fluid formation and, conversely, the former will decrease it.

Spinal fluid formation may be increased at the onset of acute febrile diseases in children, producing a syndrome known as "meningism." This, according to Merritt<sup>11</sup> and Fremont-Smith, is due to a fall in the osmotic tension of the blood which occurs at the onset of these diseases.

Dandy<sup>5</sup> has shown that ligation of the vein of Galen, which drains the choroid plexus, produces a congestion which in turn raises the capillary pressure and increases the rate of spinal fluid formation. Stopford<sup>14</sup> observed this to occur clinically in cerebellar tumors which push up on the tentorium cerebelli, compressing the great vein of Galen. Cardiac decompensation or conditions of the neck or thorax which interfere with proper venous return from the head may also be responsible for capillary congestion in the choroid plexuses, with a resultant increase in spinal fluid formation.

*Variations in the Rate of Absorption.*—Increase in the rate of spinal fluid absorption occurs principally through an increase in the difference between intracranial pressure and cerebral venous pressure. Of considerably greater importance are the factors

which act to decrease spinal fluid absorption. It is believed that almost four times as much spinal fluid is formed per day as the normal ventriculo-subarachnoid system is capable of holding. Therefore any factor which alters the process of absorption will profoundly affect the hydrodynamics of this system. Foley<sup>6</sup> and Wolff have also shown that by increasing the osmotic tension of the blood, as with the intravenous injection of hypertonic saline, spinal fluid pressure becomes decreased and a reversal of flow occurs, the spinal fluid actually being reabsorbed from the ventricles and entering the bloodstream via the choroid plexuses.

Aplasia of the arachnoid villi may lead to reduced spinal fluid absorption. More common, however, is the occlusion of these microscopic villi by blood or products of inflammation occurring either as an acute or chronic process.<sup>12</sup>

Thrombosis of the intracranial venous sinuses, if sufficiently widespread, diminishes spinal fluid absorption, as will abnormally high pressure in these sinuses. The latter occurs in cardiac decompensation and obstructed venous return from the head. Cerebral venous pressure may be temporarily elevated by coughing, sneezing or by mechanical compression of the jugulars, as in the Queckenstedt test. Patients suffering from nerve root inflammation often experience pain during attacks of coughing or sneezing due to this temporary rise of intracranial pressure.<sup>2</sup>

*Increase or Decrease in the Size of the Subarachnoid Reservoir.*—The brain and spinal cord are contained in a cavity of fixed size. Shrinkage of the brain, as in dehydration and atrophy, increases the size of the subarachnoid reservoir. If this change is rapid there will be a shortage of fluid for a period of time, and until this shortage is corrected the intracranial pressure will be less than normal.<sup>4</sup>

Of greater importance are the factors which act to decrease the size of the subarachnoid reservoir and consequently increase intracranial pressure. These include brain tumor, subdural hematoma and compression fractures of the skull. One must remember the action of hypotonic solutions which, when injected intravenously, produce a rapid increase in the bulk of the brain. McKibben<sup>10</sup> believes this is due to accumulation of tissue fluids in the interspaces and perivascular lymph spaces of the brain. The converse has also been observed to be true.



The amount of fluid in the ventriculosubarachnoid space can be estimated on lumbar puncture by noting pressures after removal of various amounts of fluid. A small drop in pressure after removal of large amounts of fluid is indicative of a large reservoir, and, conversely, the opposite is true.

Ayala derived this equation for determining the size of the subarachnoid reservoir:

$$\frac{\text{Quantity of fluid removed} \times \text{final pressure}}{\text{Initial pressure}} = \text{Rachideal quotient}$$

A value below five indicates a small reservoir and suggests the diagnosis of an expanding lesion in the cerebrum or possibly subarachnoid block. A value above seven indicates the presence of hydrocephalus or cerebral atrophy.

#### *Blockage of Cerebrospinal Fluid Circulation.—*

An obstruction in any part of the ventriculosubarachnoid system will dam the fluid, producing distention and pressure changes. The narrower parts of this system are often the most frequent sites of obstruction and are listed as follows:

1. The foramina of Monro may become involved by inflammation, scarring, sterile meningitis or tumor, usually of the choroid plexus. This tumor, if mobile, may give rise to paroxysms of headache and vomiting which may be relieved by changing the position of the head.

2. Involvement of the aqueduct of Sylvius is usually due to faulty development, plugging by fibrous material consequent to meningitis trauma or compression by tumor. Obstruction of the aqueduct produces distention of the lateral and the third ventricles. It is most commonly the result of tumors arising either in the posterior portion of the third ventricle, the midbrain, the pineal gland or the cerebellum.

3. Blockage of the fourth ventricle is usually due to tumors either of the pons, medulla or the pavement of the fourth ventricle itself.

4. Embryonic mishaps may prevent the foramina of Lushka and Magendie from functioning properly. However, they are usually involved either by meningeal adhesions or subtentorial tumors.

5. Complete block at the level of the tentorium cerebelli caused either by meningeal adhesions or tumor leads to a condition known as "communicating hydrocephalus." Since such a block reduces spinal fluid absorption to less than one-fifth that of the normal, there occurs a dilatation of the ventric-

ular system with free "communication" between the ventricles and subarachnoid space.

6. A block in the spinal canal itself may be the result of meningitis, meningeal adhesions, tumor, fractures of vertebrae or disc herniation. Spinal canal block may be either complete or incomplete and will give signs and symptoms accordingly.

#### **Methods of Determining Block**

The principal methods at our disposal for determining blockage of spinal fluid circulation are: (1) pressure studies, (2) chemical analysis of spinal fluid, (3) radiography and (4) the injection and recovery of dye. It must be understood that these methods of investigation are adjuncts to and not substitutes for thorough physical examination. For practical considerations of space these can be only very briefly discussed.

*Pressure Studies.*—With the patient lying in the lateral recumbent position, a needle is introduced into the spinal canal through the fourth lumbar interspace. An initial pressure reading is then taken, and several cubic centimeters of fluid are withdrawn. A second reading should reveal little or no change in pressure. A normal initial pressure reading is occasionally found in cases of complete spinal block. However, upon the removal of several cubic centimeters of spinal fluid, a second reading may reveal a substantial drop in pressure. The same holds true, though to a lesser degree, for cases in which the subarachnoid reservoir is unusually small (Ayala's work).

With the aid of an assistant the internal jugular veins are compressed, thereby stagnating the blood in the dural sinuses and increasing capillary congestion in the choroid plexuses. Ultimately the intracranial pressure is increased (Queckenstedt test). Should the fluid fail to rise in the manometer, an obstruction may be suspected anywhere between the cisterna magna and the point of insertion of the needle. It may also be due to severe dehydration, shock, atrophy of the brain or defective apparatus.

If on compression of the internal jugulars a latent period or slow rise is seen in the manometer, one should suspect the presence of a partial block.<sup>1</sup> It must be remembered that if the spinal canal is blocked except for a passage equal to the diameter of the needle, the fluid will rise in the manometer just as though no block were present. Should the fluid rise slowly on compression of

the jugular veins, but fail to fall, one may assume that the tumor is so shaped or located that fluid is able to pass down around but not up past the obstruction, or that pressure from above is greater than the weight of the column in the manometer.

Compression of each internal jugular vein separately will give information as to the patency of the lateral venous sinuses. Should the lateral sinus be blocked on the same side as the jugular vein compressed, there will be no rise in the manometric reading. When the opposite jugular is compressed, a reading twice that of the normal will be found.

*Chemical Analysis of the Spinal Fluid.*—If at any point in the subarachnoid space complete block occurs, two independent fluid chambers are formed. Change of pressure is not transmitted from one to the other, and there occurs a marked increase in protein in the fluid below the block. This is due presumably to venous transudation, which is hydrostatic evidence of block. Two types of fluid have been described as characteristic of block: one is yellow in color, clots on standing, and contains over 0.5 per cent protein; the other is clear, colorless, and also contains excess protein. The latter is known as the Nonne syndrome while the former is known as the Froin syndrome. In either case there is no difference in the cell count. Both are probably different degrees of the same process.

*Radiography.*—The ventricular spaces can be visualized on x-ray films by replacing the ventricular fluid with air (ventriculography). The site of tumor or obstruction can then be deduced from the size, shape and position of the ventricles and cisterns. Ventriculography is less distressing to the patient than pneumoencephalography and gives more accurate information. It is indicated in cases of increased intracranial pressure and cases of suspected tumor. Ventriculography must not be used indiscriminately since its use is not without fatality.

X-ray visualization of the spinal subarachnoid space may be made by replacing the spinal fluid with air on lumbar puncture. Such pneumoencephalography is of value in determining the level of subarachnoid block or the presence of expanding lesions in the spinal canal, i.e., tumor or disc herniation. By regulating the position of the patient's head it is also possible, in the absence of spinal canal block, to cause air, which floats

upwards in the spinal subarachnoid space into the cisterna magna, to pass into the fourth ventricle through the foramina of Lushka and Magendie. Furthermore, some of the air passes into the subarachnoid space which may be seen on x-ray film and abnormalities in its contour may be detected.

Opaque material (such as lipiodal) may be injected cisternally, and if allowed to fall until arrested, the size, shape, position and completeness of spinal canal obstruction may be determined radiographically. The lower limits of the obstruction may also be studied on x-ray examination by placing the patient in the Trendelenberg position after lumbar injection of lipiodal.<sup>13</sup>

*Injection and Recovery of Dye.*—Patency of the ventricular system can be determined by injecting phenolphthalein into the lateral ventricles. If by lumbar puncture the dye can be recovered within eight to fifteen minutes, the ventricular system may be considered patent. However, a block may still exist in the region either of the cisterna basalis or above the tentorium cerebelli. If the dye is not recovered within this time, one must consider the possibility of an obstruction located anywhere between the point of injection and the site of expected recovery.

Absorption of cerebrospinal fluid may be tested by injecting phenolphthalein into the lumbar portion of the spinal canal. A specimen of urine is collected in five minutes. Normally it will show traces of the dye. At least 30 per cent to 60 per cent should be excreted in the urine within two hours. In communicating hydrocephalus, owing to impaired absorption, the urinary excretion of the dye is markedly subnormal.

### Summary

It has been the purpose of this paper to present a concise review of the literature concerning the main factors which act to deviate spinal fluid pressure from the normal. There has also been included a discussion of the principal means at our disposal for determining blockage of spinal fluid circulation.

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# Chronic Osteomyelitis

## Treatment by Split-thickness Skin grafts

By Charles E. Stebbins, M.D.

Detroit, Michigan

CHRONIC OSTEOMYELITIS was treated by free skin grafts as early as 1902, when Lord<sup>15</sup> reported its successful use in closing an osteomyelitic cavity. Reid<sup>19</sup> reported a small series of cases in 1922 which were treated in a similar manner. The literature was then flooded with reports on the Orr treatment<sup>14</sup> and the maggot treatment, followed by the use of the sulfonamide and antibiotic drugs, and little was heard of the use of skin grafts in the treatment of osteomyelitis until late in World War II when Kelly, Rosati, and Murray<sup>11</sup> revived the method at Ashford General Hospital. In 1944, permission was granted to use this method at Gardiner General Hospital in Chicago, Illinois. The method is now being used at the Grace Hospital. This is a report on the use of split-thickness skin grafts in 103 consecutive cases of chronic osteomyelitis.

The sulfonamide and antibiotic drugs, together with early and adequate surgery, have greatly reduced the incidence of osteomyelitis. However, every active physician will at some time in his practice be confronted with a stubborn and offensive case of chronic osteomyelitis, which will not respond to such treatment. The method to be presented consists of sequestrectomy and radical saucerization on proven cases of chronic osteomyelitis, followed by early split-thickness skin grafting. All of the cases included in this report had definite radiographic and clinical evidence of chronic osteomyelitis following compound fractures. One case of hematogenous osteomyelitis is included.

There is much to recommend this method of treatment:

1. It stops the local destructive process and the resultant scar formation.
2. The dead space is exteriorized.
3. The patient is relieved of the discomfort of a draining, offensive wound.
4. The general health is greatly improved as a result of the elimination of sepsis.
5. There is a great improvement in the patient's men-

tal outlook by having a healed wound and the opportunity to be ambulatory.

6. Improving the nutrition of the wound, stimulates bone growth and the number of cases requiring bone grafts is reduced.

### Technique

Sequestrectomy and radical saucerization are done on each patient. The draining wound is excised widely, saving as much uninfected and vital tissue as possible. All sequestra and infected bone are removed, keeping in mind that the defect thus formed must be covered with a skin graft. Therefore, all pencil-like thrusts, crevices, and angles are avoided.

The wound is packed firmly with fine-mesh gauze moistened with saline or glycerine. Firm pressure is necessary for the development of fine healthy granulations, and to control the bleeding. A pressure dressing is applied and the involved part adequately immobilized in plaster. Penicillin is given prophylactically.

The dressing is removed five days after the saucerization operation and the wound evaluated for skin grafting. The great majority of wounds appear clean and present healthy granulations at this time (Fig. 1). Continuous warm boric or saline compresses are applied to these patients. Routinely on the seventh day following saucerization, the skin grafting operation is done. The only contraindications to skin grafting these defects at this time are definite abscess formation, severe infection, definite drainage from exposed bone, and severe pyocyanous infection.

All of the split-thickness skin grafts are taken with the Padgett-Hood dermatome<sup>8</sup> from the thigh or abdomen. The graft is cut ten to fifteen thousandths of an inch in thickness. A graft cut this thin is more apt to survive than a thicker graft.

The defect is measured with a ruler as accurately as possible, the small irregularities being noted visually. The graft is then cut and tailored to fit this defect and sewed into form of a sac or bag with absorbable sutures.

The following method has been evolved to maintain the graft in close approximation to the granulating bed. This is a very important and often neglected part of any skin grafting procedure. Sterile absorbent cotton is wrung out in water and saturated with glycerine. Small pieces of cotton are torn off and packed into the defect, starting

From the Department of Surgery, the Grace Hospital. The author of this paper is chief resident in surgery at the Grace Hospital.



Fig. 1. (Case 1) Appearance of the defect in the thigh and femur at time of operation—one week following sequestrectomy and saucerization.



Fig. 2. (Case 1) Appearance of the defect at operation after skin graft had been sutured to cover the defect. Small pledgets of moistened cotton are filling the base of the grafted defect.



Fig. 3. (Case 1) Appearance of the grafted defect twenty-one days after skin grafting.

with the deepest portion (Fig. 2). Packing then continues from the bottom outwards, small pieces of cotton being used throughout, thereby assuring contact of the graft at all points. A mound of cotton is built up outside of the defect, and this is covered with a layer of latex rubber, formed by opening an ordinary rubber condom. This prevents the glycerine from being absorbed onto the outside dressing. A pressure dressing is applied, using fluffed gauze or mechanics' waste, sheet wadding and Ace bandages, and the part adequately immobilized in plaster. The donor site of the skin graft is dressed with fine mesh gauze impregnated with scarlet-red ointment. Somewhat similar methods of treating these defects by skin grafting have been presented by Knight,<sup>13</sup> Fischer,<sup>6</sup> Armstrong,<sup>1</sup> Converse,<sup>5</sup> and McClintock.<sup>17</sup>

#### Postoperative Treatment

Postoperatively, all patients receive ascorbic acid and a high protein diet. Penicillin is continued in the cases which present any evidence of infection, or in which the wounds are extremely large.

The dressing is first changed on the seventh postoperative day, unless there are signs of infection such as marked odor from the dressing, drainage through the dressing, or a continuous elevation of temperature. Evidence of infection calls for immediate dressing change. The type of dressing used after removal of the primary dressing depends upon the appearance of the grafted defect. If the graft is completely healed a boric ointment gauze dressing is applied or the graft is left exposed to the air. However, if the grafted area is not completely healed, and there is no evidence of severe infection, continuous warm saline or boric

compresses are applied to the defect and continued until complete healing has taken place (Fig. 3).

#### Complications

The most frequent complication following skin grafting of these defects is pyocyanous infection which can be effectively treated with 1 per cent acetic acid compresses or half-strength Burow's solution. Mixed infections are treated with wet compresses and sulfadiazine and penicillin. Drainage from bone which is either exposed or can be probed necessitates further sequestrectomy and saucerization.

#### Results

Thirty days following skin grafting has been selected arbitrarily as the earliest possible time at which the success or failure of the operation can be determined.

TABLE I

103 cases of osteomyelitis treated with split-thickness skin grafts
73 cases were 100% healed in 30 days
86 cases were 100% healed in 60 days

TABLE II

All cases less than 80% healed in 30 days were regrafted
18 cases—required regrafting
8 cases—required sequestrectomy before grafting

TABLE III

4 cases—required more than 60 days to heal completely
The 13 remaining cases were considered failures—requiring further surgical and medical treatment

#### Preservation of Excess Split-Thickness Skin

Quite often an excess of skin is cut. If desired, this skin can be preserved for future use on the same patient in the event that the "take" of the original graft is not entirely successful. The graft is glued to fine mesh gauze with dermatome ce-



ment, and the excess gauze is trimmed away. The graft is folded onto itself so that the raw skin surfaces are together and wrapped in gauze moistened with normal saline. This then is placed in a sterile

homologous grafts were tried, and all resulted in failures. These results are comparable to those reported by Webster in 1944<sup>21</sup> and Flatt<sup>7</sup> in 1948.

### Subsequent Treatment

After the osteomyelitic wound has been healed by the skin graft, we are faced with the problem of subsequent treatment of the healed cavity (Fig. 4). Some of the patients will require no further operation. These are the patients in which the loss of soft tissue and bone was not sufficient, or in such an area, as to cause permanent weakness or impairment of function. The remaining cases have the split-thickness skin replaced, the osteomyelitic cavities obliterated, and in some cases the bone must be strengthened. Kelly<sup>10,12</sup> reports that one-quarter of his cases required no further treatment after skin grafting.

Forty of the 103 cases presented here were followed to completion. Seventeen of these cases required no further treatment following skin grafting. Twenty-three cases required obliteration of the cavities and replacement of the skin grafts. All of the cavities in this series were obliterated by iliac bone chips. The skin grafts were replaced by pedicle tubes, pedicle flaps, or simple excision and closure (Fig. 5). Reynolds and Zaepfel<sup>20</sup> have recently reported equally good results on the remaining cases in this series which they followed to completion.

Other authors have reported good results with primary closure following sequestrectomy<sup>16</sup> muscle transplants,<sup>4</sup> pedicle tube grafts,<sup>2,8</sup> sliding flap grafts,<sup>3,4,9</sup> and obliteration of the osteomyelitic cavities with plastic substances.<sup>10</sup> However, I believe the method presented will give the best results in the hands of the average surgeon with no special training in orthopedics or plastic surgery.

### Summary

1. A method has been presented for the early closure and healing of osteomyelitic cavities.
2. The method consists of sequestrectomy and radical saucerization followed in seven days by split-thickness skin grafting.
3. From one-quarter to one-third of the cases will require no further treatment following the skin grafting. The remaining cases will require further orthopedic and plastic surgery.

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Fig. 4. (Case 2) Appearance of the grafted defect in the thigh and femur thirty days following skin grafting.

Fig. 5. (Case 2) Appearance of the thigh two weeks after the grafted defect had been obliterated with iliac bone chips (three months following the healing of an osteomyelitic cavity).

airtight jar containing a small amount of normal saline. Then the jar is sealed with paraffin. It is stored in an electric refrigerator at approximately 37° Fahrenheit. These grafts are used as autogenous grafts on cases which do not heal completely and in which another skin grafting operation does not seem justifiable. Grafting of the preserved skin is done on the ward. The packing and the dressing are essentially the same as used following the regular skin grafting.

Twelve cases have been regrafted successfully with preserved skin which had been stored for periods ranging from fourteen to thirty-six days. Five cases were unsuccessfully treated. Three

# Procaine Penicillin with Aluminum Monostearate

## Serum Concentrations After Oral and Intramuscular Administration

By Jean M. Robinson, M.D.

Detroit, Michigan

SINCE THE INTRODUCTION of penicillin as a therapeutic agent, there has been unceasing effort to develop a preparation which would give therapeutic serum levels over a long period of time, thus decreasing the pain and discomfort associated with frequent parenteral injections. The earliest penicillin products for intramuscular or oral administration required a dose every three hours in order to maintain adequate serum levels. A great advance both from the standpoint of the patient's comfort and the conservation of time of the professional staff was the development of penicillin preparations for intramuscular use, giving satisfactory therapeutic levels for twenty-four-hour periods. One of the first of these, penicillin G in oil and beeswax (Romansky formula),<sup>6</sup> had two drawbacks. Each injection was painful, and frequently a lump remained at the injection site. Procaine penicillin suspended in oil was next introduced by Herrell, Nichols and Heilman.<sup>3</sup> It had none of the disadvantages of penicillin G in oil and beeswax.

The most recent advance in attempts to prolong the action of penicillin was the addition of aluminum monostearate gel by Evan Thomas to peanut oil suspensions of procaine penicillin.<sup>7</sup> This preparation has been found to give blood concentrations of .03 u./c.c. or higher<sup>2</sup> for ninety-six hours in the majority of patients. It has also been noted that procaine penicillin of small particle size in peanut oil gelled with 2 per cent aluminum monostearate maintained a blood concentration over a longer period than the same combination but with large-sized particle procaine penicillin.<sup>7</sup> The present study was undertaken to determine the serum penicillin levels obtained using both the intramuscular and oral routes, and with different doses of these preparations.

Dr. Robinson is an Upjohn Research Fellow in Medicine, Wayne County General Hospital, Eloise, Michigan. This investigation was aided by a grant from the Upjohn Company, Kalamazoo, Michigan.

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## PSEUDOMYXOMA PERITONEI OF OVARIAN ORIGIN

(Continued from Page 318)

be inconsiderable, as involvement of even the most remote upper areas is often demonstrable with even the smallest amount of the clinging, tenacious pseudomucin in the peritoneum.

Three representative cases have been presented.

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Method

In this study, procaine penicillin G (small particle size) suspended in peanut oil with 2 per cent w/v aluminum monostearate\* was the intramuscular preparation used. Single injections of 1 c.c. (300,000 u.) were given to a large group of hospital patients and serum penicillin concentrations determined at one, two, four, eight, twenty-four, forty-eight, seventy-two, and ninety-six, and

duration of therapeutic serum penicillin levels obtained by the oral administration of penicillin preparations, buffered and unbuffered. To study this problem, single doses of 100,000 u. of crystalline procaine penicillin G with 2 grains (0.13 gm.) aluminum monostearate buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub> were given to five patients. Serum penicillin concentration at one, two, four, eight, sixteen, and twenty-four hours were com-

TABLE I.

Tube No.	Test Series										Penicillinase Control Series			Penicillin Concentration	Special Controls
	1	2	3	4	5	6	7	8	9	10	1	2	3		
Standard Penicillin (1 u./c.c.)	*	*	*	*	*	*	*	†	†	†					Inoculum† Inoculum with Penicillinase †
Serum A	*	*	*	*	*	*	†	†	†	†	*	*	†	0.50 u./c.c.	
Serum B	*	*	†	†	†	†	†	†	†	†	†	†	†	0.06 u./c.c.	
Serum C	*	†	†	†	†	†	†	†	†	†	†	†	†	0.03 u./c.c.	Penicillinase *
Serum D	*	†	†	†	†	†	†	†	†	†	*	†	†	0.00 u./c.c.	
Serum E	*	*	*	*	*	*	*	†	†	†	†	†	†	2.00 u./c.c.	Inoculum with Penicillinase plus
Serum F	*	*	†	†	†	†	†	†	†	†	*	*	†	0.00 u./c.c.	Penicillin †

120 hours. The criteria for selection of patients were that the patient be moderately sedentary and that no sulfonamide or antibiotic had been administered for two weeks prior to testing. A total of 110 patients were used for the intramuscular studies; forty patients were studied using the oral preparations. To study what effect muscular activity had upon the serum penicillin levels, observations were made in a number of the patients who received the intramuscular products. In another group of patients a series of multiple injection studies was done to determine how high the serum penicillin concentration would rise, how well the high levels were maintained, and what side reactions, if any, would occur when the high levels were reached. Several dose schedules were followed: (1) 1 c.c. (300,000 u.) injections were given every twenty-four hours for five days, with blood samples at one, two, eight, and twenty-four hours; (2) followed by injections every twelve hours for five days with levels estimated at one, two, and twelve hours after each of the daily injections; (3) finally 2 c.c. (600,000 u.) injections were administered every twenty-four hours for five successive days and levels were determined at one, eight, and twenty-four hour intervals.

Recently interest has been reawakened in the

pared with respect to duration of effective levels with those obtained using 100,000 u. doses of three other buffered crystalline preparations not containing aluminum monostearate.† Further studies were done in twenty patients, using much greater amounts of oral crystalline penicillin G\*\* (500,000 u. and 1,000,000 u. ) buffered and unbuffered, to determine the concentration of penicillin obtained in the serum at one, two, four, and eight hours, and the duration of effective blood levels with the buffered products as compared to the unbuffered.

The B. subtilis serial dilution method,<sup>5</sup> a modification of Rammelkamp's method,<sup>4</sup> was used in the assay of serum penicillin concentrations. This was accomplished by using 0.5 c.c. of each serum serially diluted in broth through ten tubes and adding 1.5 c.c. of a 2 per cent B. subtilis inoculum.

†Tablet 1—100,000 u. crystalline procaine penicillin G with 2 grains (0.13 gm.) aluminum monostearate, buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub>.  
Tablet 2—100,000 u. crystalline penicillin G (potassium salt) buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub>.  
Tablet 3—100,000 u. (2 tablets, 50,000 u each) crystalline procaine penicillin buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub>.  
Tablet 4—100,000 u. (2 tablets, 50,000 u each) crystalline penicillin calcium buffered with 0.5 gm. of trisodium citrate. Hayden Chemical Corporation, N. Y. (Jameston Pharmacal Company, Detroit-Distributors).  
\*\*Tablet 5—500,000 u. crystalline penicillin G (potassium salt), unbuffered.  
Tablet 6—500,000 u. crystalline penicillin G (potassium salt, buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub>.  
Tablet 7—1,000,000 u. crystalline penicillin G (potassium salt), unbuffered.  
Tablet 8—1,000,000 u. crystalline penicillin G (potassium salt), buffered with 4 grains (0.26 gm.) CaCO<sub>3</sub>.

\*The penicillin products used in this study were provided by the Upjohn Company, Kalamazoo, Michigan.

# PROCAINE PENICILLIN—ROBINSON

TABLE II. RESULTS OF SINGLE AND MULTIPLE INTRAMUSCULAR INJECTION STUDIES USING THE STATED AMOUNTS OF PROCAINE PENICILLIN SUSPENDED IN PEANUT OIL WITH 2 PERCENT W/V ALUMINUM MONOSTEARATE. (1 C.C. CONTAINS 300,000 U)

Amount of Penicillin and No. of Injections	Average Penicillin Concentration in u./c.c. of Serum at the Stated Hours After Each Injection																							
	1 hour						2 hours						4 hours						8 hours					
1. 1 c.c. 1 Inj. 11 patients	.184						.161						.507						.121					
2. 1 c.c. 1 Inj. 75 patients	.230						.123						.078						.070					
3. 1 c.c. every 24 hours for 5 days 9 patients	.145						.284						.777						.680					
4. 1 c.c. every 24 hours for 5 days 5 patients	.236	.210	.154	.108	.348	.298	.160	.184	.258	.336	.312	.24	.362	.424	.336	.210	.148	.440	.398	.350	.236	.120	.055	.818
5. 1 c.c. every 12 hours for 5 days 5 patients	.096	.098	.092	.134	.210	.12	.236	.312	.185	.210	.324	.2	.375	.250	.1	.474	.360	.12	.298	.096	.098	.092	.134	.210
(top two lines represent first 2½, bottom last 2½ days)	.405	.310	.198	.666	.120	.274	.373	.560	.550	.666	.375	.600	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
6. 2 c.c. every 24 hours for 5 days 5 patients	.242	.225	.324	.500	.400	.330	1.00	.750	.650	1.10	.550	.750	.600	.475	.436									

Daily penicillin standards were prepared in duplicate. One-half c.c. of solution containing 1 u./c.c. of penicillin, when diluted to 1-128 (sixth tube of series, Table I) should inhibit the growth of *B. Subtilis* P.C.I. 220.†† Therefore, serum which inhibits at the same dilution contains 1 u./c.c. of penicillin; if it inhibits at one-half that dilution (fifth tube, 1-68) it contains 0.5 u./c.c., and if it inhibits at twice the dilution (seventh tube, 1-256) it contains 2.0 u./c.c. In addition, a duplicate serial dilution of two or more tubes was set up for each serum, and penicillinase added to the inoculum in the tubes to indicate the presence or absence of naturally occurring *B. subtilis* inhibitors in the test serum.<sup>1</sup> If the number of tubes showing inhibition in the test and control series is equal, the penicillin concentration is considered zero. Table I shows a sample reading of several sera. If the number of tubes showing inhibition in the test is greater than in the control series, full value is assigned to the penicillin concentration. By this method the lowest serum penicillin concentration which can be read is .03 u./c.c.

## Results

The results obtained following the use of the intramuscular preparations are presented in the tables. In Table II-1 (1 c.c.-300,000 u. of procaine penicillin suspended in peanut oil with 2 per cent w/v aluminum monostearate), it can be seen that serum concentrations reached effective therapeutic levels in the first hour following the injection. The average serum concentrations are well

above the generally accepted minimum desired therapeutic level<sup>2</sup> of .03 u./c.c. at one, two, four, and eight hours. In only one instance in the group of eleven patients did the concentration fall below .03 u./c.c. at the fourth hour. These results indicate a prompt rise in the penicillin level during the first hours following the administration of this preparation.

One c.c. (300,000 u.) of the same intramuscular preparation given to seventy-five patients maintained an average serum penicillin concentration much greater than .03 u./c.c. for 120 hours after injection, as is shown in Table II-2. However, the serum levels of some individuals in this group dropped below .03 u./c.c. even at twenty-four hours; this was likewise true with greater frequency at the later hours. Of the group of seventy-five patients levels were greater than .03 u./c.c. in 95 per cent of them at twenty-four hours, 94 per cent at forty-eight hours, 90 per cent at seventy-two hours, 70 per cent at ninety-six hours and 70 per cent at 120 hours.

In the nine patients injected with 1 c.c. (300,-000 u.) of the same preparation every twenty-four hours for five days, the average serum penicillin levels rose from five times the minimum level of .03 u./c.c. at twenty-four hours after the first injection, and to twenty-nine times that level twenty-four hours after the fifth injection (Table II-3). One patient of this group was moderately active on the ward, and one was incessantly moving about. The serum levels of these ambulatory patients showed a tendency to be lower twenty-four hours after injection than those of the sedentary

††U. S. Government Food and Drug Administration designation.



patients. Figure 1 represents the average serum levels of six of the patients of this group, demonstrating the rise in serum levels and the maintenance of the high levels.

level of .03 u./c.c. and were maintained close to this level or higher until twelve hours after the last injection.

When the dose of intramuscular penicillin was

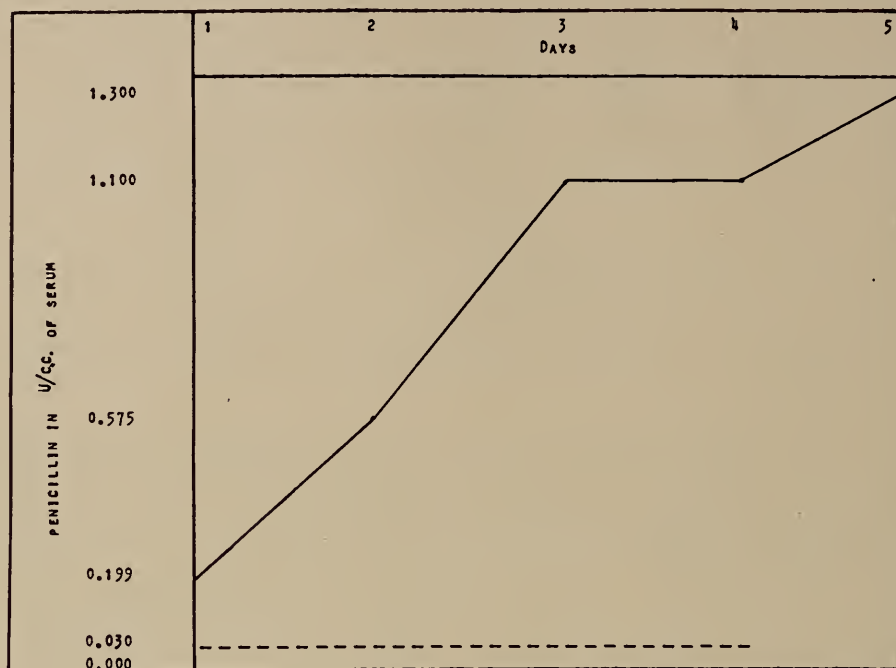


Fig. 1. Daily injections for five successive days of 1 c.c. (300,000 u.) of procaine penicillin in peanut oil with 2 per cent w/v aluminum monostearate. Average serum levels in u./c.c. at twenty-four hours after each injection.

Findings in the sera of five patients who were injected every twenty-four hours for five consecutive days with 1 c.c. (300,000 u.) of the intramuscular preparation, and whose sera were tested at one, two, eight, and twenty-four hours, are summarized in Table II-4. The average serum penicillin concentrations in this group showed a gradual rise as the number of injections increased. The serum levels were higher in most cases shortly after injection, but were maintained at satisfactory levels through each twenty-four-hour period. In this group, two patients were moderately ambulatory and one was continually moving about. Again, the tendency toward low serum levels at the eight and twenty-four-hour periods was noted, though initially the penicillin concentrations of these active patients were sometimes higher than those of the sedentary patients.

One c.c. (300,000 u.) of the intramuscular penicillin was next given to five patients every twelve hours for five consecutive days (Table II-5). The average serum levels at one, two, and twelve hours after each injection rose to ten times the minimum

doubled and five patients were given 2 c.c. (600,000 u.) every twenty-four hours for five successive days, somewhat different values were obtained (Table II-6). The first hour after the first injection the serum level was eight times the .03 u./c.c. level. Serum levels after the second injection were maintained at greater than ten times the minimum level, and after the third injection they reached a level thirty times that of the minimum level.

The results of the series of oral studies are shown in Table III. Tablet No. 1, containing 2 grains aluminum monostearate, resulted in average serum penicillin concentrations which were adequate at one, two, and eight hours, but were below .03 u./c.c. at four hours. The average serum levels of Tablets No. 2, 3, and 4 were higher than those of the aluminum monostearate preparation at one, two, and four hours, but lower at the eight-hour period.

Larger doses of crystalline penicillin G, buffered and unbuffered, were given to groups of five patients (Table III, Tablets 5, 6, 7, and 8). Very high average serum penicillin concentrations were

obtained at one hour after administration, but they fell rapidly and could not be considered adequate in most cases for longer than eight hours. Tablet 5 gave therapeutic levels for only four hours. The

developed small pruritic hemorrhagic areas on his legs. These subsided following antihistaminic therapy. There were no cases of local reaction at the site of injection. The oral preparation Tablet

TABLE III. SERUM LEVELS FOLLOWING ADMINISTRATION OF VARYING AMOUNTS OF ORAL PENICILLIN PREPARATIONS, BUFFERED AND UNBUFFERED.

Oral Penicillin Preparation	Average Penicillin Concentration in u./c.c. at					
	1 Hr.	2 Hrs.	4 Hrs.	8 Hrs.	16 Hrs.	24 Hrs.
Tablet 1	0.050	0.112	0.024	0.074		
Tablet 2	0.350	0.175	0.093	0.031		
Tablet 3	0.099	0.112	0.086	0.062		
Tablet 4	0.500	0.325	0.112	0.037		
Tablet 5	0.825		0.900	0.025	0.015	0.015
					12 Hrs.*	
Tablet 6	1.800		0.450	0.099	0.031	0.000
Tablet 7	2.200		1.850	0.287	0.031	0.025
Tablet 8	8.800		2.650	0.562	0.031	0.012

\*This value, only, represents a 12 hour sample rather than a 16 hour sample.

levels obtained with the buffered products were higher than those of the unbuffered at eight hours.

### Discussion

Procaine penicillin (small particle size) suspended in peanut oil with 2 per cent w/v aluminum monostearate has several attributes which make it of great promise in therapy. The first is the duration of adequate therapeutic serum levels in the majority of cases for ninety-six hours, necessitating only one injection every three or four days, as seems necessary. The rapid rise to adequate serum levels within the first hours after injection is a second asset. The sustained high serum concentrations can be obtained by multiple doses, and may prove desirable in the treatment of virulent infections. This penicillin preparation is free flowing and therefore easily withdrawn from the vial and easily administered intramuscularly. Injection was not painful and no residual lumps were observed at the injection site.

Oral preparations, buffered or unbuffered, to be effective must be given in doses about five times the size of intramuscular doses. Even then, effective therapeutic levels are not obtained for longer than eight hours, and in many cases only for four hours after administration. The oral preparations may prove of most value as a means of carrying on treatment after the first acute stage of a disease has passed.

Only one sensitivity reaction occurred after injection of any of the intramuscular preparations. On the fourth successive day of administration of 1 c.c. (300,000 u.) of the penicillin, one patient

7 caused two reactions in the group of six patients to which it was given. One was an asthmatic attack occurring fifteen minutes after administration of the tablet. This was controlled in about an hour by the use of aminophylline and pyribenzamine. This patient's serum level at one hour after administration was 8 u./c.c. The other reaction was a pruritic one confined to the face and neck. The onset was about two hours after administration of the tablet, and the pruritus was relieved by the use of benadryl.

It was noted above that the two active and three moderately active patients of the entire group who received intramuscular injections showed generally lower serum penicillin concentrations than the sedentary patients, though initially the active patients' serum levels were often higher. The high levels soon after injection may be due to increased massage of the injection site, releasing penicillin into the blood stream early. Rapid excretion of the penicillin from the blood stream would be expected in the more active patients, thus accounting for the low levels later.

### Conclusions

A single injection of 1c.c. (300,000 u.) of procaine penicillin (small particle size) suspended in peanut oil with 2 per cent w/v aluminum monostearate was found to give therapeutic serum penicillin concentrations during the first hour after injection; it maintained therapeutic levels for seventy-two hours in 90 per cent of cases and maintained therapeutic levels for ninety-six and 120 hours in 70 per cent of cases.

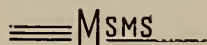


Injections of 1 c.c. of the intramuscular penicillin every twenty-four hours and every twelve hours for five successive days gave serum levels ranging from five to thirty times the minimum level of .03 u./c.c. for twenty-four and twelve hours, respectively, following the last injection. Injection of 2 c.c. (600,000 u.) every twenty-four hours for five successive days gave serum levels eight times the minimum therapeutic level at one hour after injection, and the serum levels were maintained at .03 u./c.c. or higher for twenty-four hours after the last injection. Sensitivity reaction occurred in only one patient of the twenty-four who received multiple injections.

Oral crystalline procaine penicillin with 2 grains (0.13 gm.) aluminum monostearate, buffered with 4 grains (0.26 gm.)  $\text{CaCO}_3$ , given in single doses of 100,000 u., gave serum penicillin concentrations which were adequate but generally lower at one, two, and four hours, and higher at eight hours than levels obtained by the use of three other oral buffered crystalline penicillin preparations. Much larger doses (500,000 u. and 1,000,000 u. per tablet) of crystalline penicillin G, buffered and unbuffered, gave adequate serum penicillin concentrations for only eight hours, and the serum levels of the buffered products were higher than those of the unbuffered.

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## PATHOLOGICAL ALTERATIONS OF SPINAL FLUID PRESSURE

(Continued from Page 333)

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## Anemia in Babies Delivered by Cesarean Section

### Its Possible Prevention

By R. S. Siddall, M.D., Detroit, Michigan, and  
R. H. West, M.D., Evanston, Illinois

ALTHOUGH cesarean section should theoretically offer the least trying and therefore safest method of delivery for the infant, statistics show, almost without exception, a higher fetal mortality with abdominal than with vaginal birth. Much of the additional loss can be ascribed to the direct effect on the child of conditions for which the operation is performed, or indirectly to immaturity resulting from the frequent necessity for cesarean section before full term. There still remain, however, a substantial number of deaths which have as yet been unexplained. The death of a child soon after abdominal delivery, with exsanguination as the apparent cause, suggested investigation of the possible role of anemia as a factor in cesarean section fetal mortality.

Babies born by cesarean section, without selection as to maturity or indication for operation, received blood counts and hemoglobin estimations on the day of delivery, and for confirmation usually again on the third neonatal day. The average hemoglobin reading was 15.1 grams (98 per cent), with variations from 9 grams (59 per cent) to over 19 grams (over 124 per cent). The average of the red blood cell counts was 4,490,000 per cubic millimeter, with extremes of 2,540,000 and 6,080,000. Figure 1 shows the numerical distribution of the results for the red blood counts and the hemoglobin estimations in the sixty babies studied.

It will be noted from Figure 1 that the majority of these blood counts and hemoglobin readings were in general accord with the usually accepted, and therefore comparatively high, normal figures for the newborn. In three, however, the results were so unusually low as to be considered abnormal for infants. The hemoglobin determinations for these three lowest were 9, 11, and 11.5 grams per 100 c.c. which correspond to percentages of 59, 72, and 75. The red blood counts expressed in millions were 2.54, 3.10, and 3.44 per cubic

From the Department of Obstetrics and Gynecology, Harper Hospital. Dr. West was the Chief Resident in Obstetrics and Gynecology in 1948.

millimeter. These babies were pale, listless, and obviously suffering from anemia. The two most seriously affected received blood transfusions of 70 and 50 c.c. respectively, with marked improve-

ment. These babies were pale, listless, and obviously suffering from anemia. The two most seriously affected received blood transfusions of 70 and 50 c.c. respectively, with marked improve-

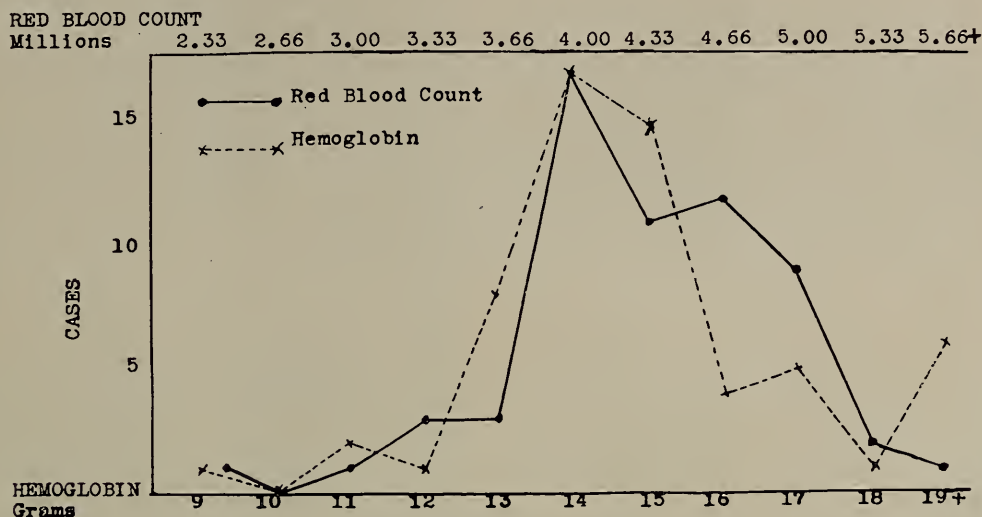


Fig. 1

ment. All three were finally discharged from the hospital in satisfactory condition.

In an effort to determine the cause of the anemia in these babies, the case records were reviewed. All three were at or near full term. The indications for cesarean section were placenta previa, cesarean section in the previous pregnancy, and fulminating toxemia. The mother delivered by cesarean section for placenta previa had a hemoglobin reading of 9.9 grams (64 per cent) before transfusion and a red blood count of 3,120,000. The other two were not anemic. The only seemingly significant point in common for the three cases was the fact that the incision into the uterus passed through the placenta, which was implanted beneath. It is to be noted that the placentas were actually cut through and not simply separated from the uterine wall and pushed aside. There were a number of the latter but with no apparent effect on the infant's blood count in any case. It should also be stated that there were two other instances of incision of the placenta but without anemia, the hemoglobin readings being 15.9 and 16.0 grams.

Speculation as to the cause of the anemia in the three affected babies leads to the probable conclusion that the incisions through the placentas cut one or more large vessels with consequent rapid blood loss from the fetal circulation. It is also quite conceivable in the case of the two

through, whereas that of her sister was intact, and she had no anemia. Also, it may be significant that in the case of the baby with the most marked anemia the record of the operation stated that there was unusual difficulty and delay in extracting the child from the uterus. Conceivably, further delay could have resulted in fatal blood loss. Even the nonfatal degree of anemia which was present in these three babies could have been a very serious factor in combination with other complications.

### Summary

Hemoglobin estimations and red blood cell counts on sixty babies delivered by cesarean section were within the normal newborn range for the majority. Three, however, had definite anemia. The placentas of these infants had been cut as the uterus was incised, and it is likely that severed placental vessels resulted in severe fetal blood loss. In two other cases with incision of the placentas, the babies were normal. It seems probable that in these instances the large vessels escaped injury.

These observations indicate the possibility of marked or even dangerous anemia of the infant when the placenta is cut through at the time of cesarean section.

955 Fisher Building.



# The Collagen Diseases

L. L. Stewart, M.D.

Detroit, Michigan

IN 1933, Dr. F. Klinge, a German pathologist, described certain changes of the connective tissue structures that accompanied better known changes previously described in rheumatic fever, as a "swelling of the ground substance with increased visibility and a straightening and thickening of the collagen fibers associated with increased friability and intense eosinophilia." It was these observations that later formed the basis for the "collagen disease group." Since that time, the group has been expanded to include such disease entities as: (1) disseminated lupus erythematosus, (2) periarteritis nodosa, (3) scleroderma, (4) thromboangiitis obliterans, (5) dermatomyositis, (6) glomerulonephritis (some cases), (7) malignant hypertension, (8) rheumatoid arthritis, and (9) ulcerative colitis.

In order to develop the concept of a disease of connective tissue structures, the normal histology of the connective tissue has to be studied to find what structures can be involved. The main constituents of the connective tissue are: (1) collagen fiber, which is a nonbranching, flexible, albuminoid substance that resists pulling; (2) reticular fibers, which are non-elastic branching and may be found either alone or continuous with the collagen fibers but possess different staining equalities from them; (3) elastic fibers which form a branching, filamentous, interlacing network in the connective tissue and which stretch but resume their shape; (4) ground substance, a jelly-like, amorphous, cement material, which holds the connective tissue and other cellular components together. Graphically, these structures appear as in Figure 1.

As previously stated above, and again stated for re-emphasis, there is a swelling of the ground substance with increased visibility and a straightening and thickening of collagen fibers associated with increased friability and intense eosinophilia. Finally, there is a necrosis of this connective tissue structure, the end result of which is a hyalinization of the involved area. The acute phase of this process is known as "fibrinoid degeneration and necrosis." This fibrinoid necrosis is the basis on

From the Department of Medicine, the Grace Hospital. The author is a Resident in Internal Medicine.



Fig. 1. (above)

Fig. 2. (below) (1) Thickening, straightening, swelling of collagen fibers, with fragmentation. (3) Increased density, visibility, and swelling of the ground substance.

which all postulations of a "disease of the collagen system" rests. Graphically, these changes are as shown in Figure 2.

In every disease, either assigned to, or allied with the collagen disease group, the above process is going on. It is because of this fact that the grouping took place.

In rheumatic carditis, the fibrinoid necrosis may be found in the pericardium, myocardium, and/or endocardium. In the endocardium and in the valve leaflets, the characteristic lesion is a subendothelial fibrinoid degeneration that builds up forming a verrucous lesion, the endothelial covering of which may, or may not, undergo necrosis. The degenerative process of rheumatic fever may also be seen in other areas such as synoviae, capsular tissue of joints, subcutaneous nodules, and at costo-chondral junctions. In diagram, the areas of involvement in rheumatic carditis are those shown in Figure 3.

In such lesions as periarteritis nodosa, dissemi-

nated lupus erythematosus, and malignant hypertension, there are markedly similar lesions involving the blood vessels. This is a progressive process having the following phases: (1) subintimal fibri-

3. Periarteritis nodosa, with its severe generalized vascular damage, especially of the heart and arteries of medium and small size, along with a severe inflammatory or allergic local reaction in-

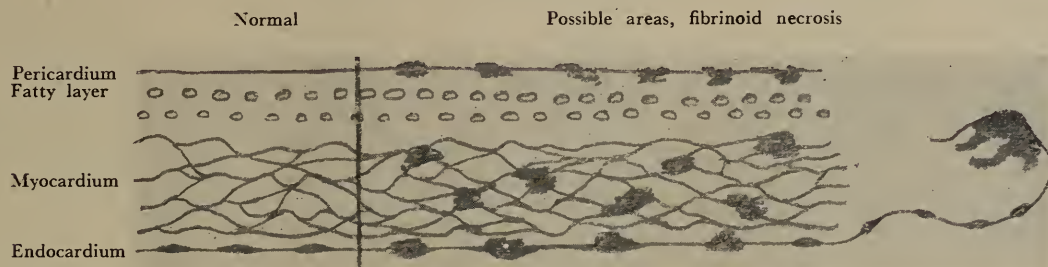


Fig. 3

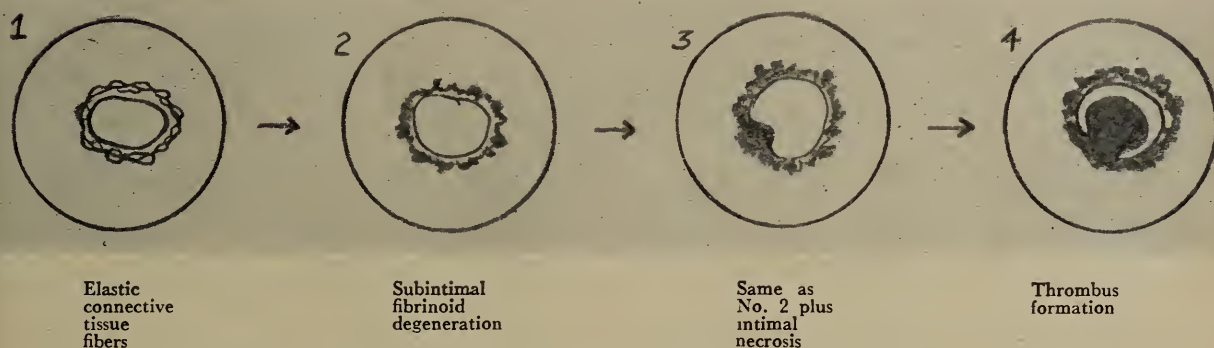


Fig. 4

noid degeneration; (2) extension of the degeneration, with necrosis; and, finally, (3) thrombus formation. These may likewise be shown in a diagram as in Figure 4.

With this basic pattern of fibrinoid degeneration and necrosis, there is an accompanying cellular infiltrate (expressed this way to avoid the unsettled question of whether this is inflammatory or allergic in nature). The only difference is the severity of the involvement and the degree of the accompanying reaction. For example:

1. Disseminated lupus erythematosus with a maximal injury of collagen fibers, with frustrated fibroblast proliferation, and striking degenerative changes involving particularly the small arteries, arterioles, and capillaries.

2. Rheumatic fever with its less intense injury of collagen, but progressive fibroblast proliferation, production of new fibrous tissue, and large Aschoff cells. It has a predilection for the heart, subcutaneous tissue (as localized nodules), and joint synovia, with only a mild inflammatory or allergic reaction.

involving the perivascular tissue and all layers of the vessel involved. This infiltrate is composed of many eosinophiles, polymorphonuclear and round cells, and is accompanied by great degeneration and necrosis of blood vessel walls.

4. Scleroderma, with its tremendous debilitating involvement of all connective tissue most apparent in the skin on physical examination, and accompanied by minimal signs of allergic or inflammatory reaction.

It is important to point out that, although there are some basic similarities of underlying pathology, clinically the degree of involvement and the signs and symptoms are widely different, as is readily seen by referring to Table I on differential diagnosis. There is enough overlap of sites of preference (skin, vascular tree, pleura, synovia, et cetera) and symptoms and signs to make some investigators believe in this grouping. Others, however, are doubtful of its value, considering it a "wastebasket."

Treatment has been inadequate, especially in such conditions as disseminated lupus erythemato-



TABLE I. FIVE DISEASES OF THE CALLAGEN SYSTEM

<i>Disseminated Lupus Erythematosus</i>	<i>Periarteritis Nodosa</i>	<i>Acute Rheumatic Fever</i>	<i>Dermatomyositis</i>	<i>Scleroderma</i>
Prolonged irregular fever with tendency to remission	Insidious to violent onset	Fever	Weakness	Fever usually absent, can have:
Recurrent involvement of synovial and serous membranes	Fever moderate	Rapid pulse	General malaise	Subacute febrile period
Depression of bone marrow function	Sweating	Sweating	Fever	General malaise
Vascular alterations in skin, kidneys, and other viscera, in advanced stages	Tachycardia	Severe prostration	Prostration	Subcutaneous Changes
Rash	Fleeting edema	Polyarthritides—migratory	Dermatitis with or without edema	Induration
Swollen joints	Progressive:	Erythemas	Muscular:	Brawny edema
Painful joints	Weakness	Urticaria	Weakness	Hardening
Leukopenia	Joint pain	Purpura	Pain	Atrophy
Red blood cells in urine	Muscular pain	Transient paresis	Atrophy	Painful ulceration
Albumin in urine	Abdominal pain	Endocarditis	Fibrous contraction	Difficult movement
Arthralgias	Leukocytosis	Myocarditis	Relapses	Digestive disturbances
Pleurisy	Transient edema	Pericarditis		Paresthesias
Pericarditis	Slight elevation of blood pressure	Pleurisy		Numbness
Peritonitis	Urticaria	Exudative dermatoses		Tingling
Endocarditis	Purpura	Erythema nodosum		
Petechiae	Subcutaneous nodules	Subcutaneous nodules		
Sensitivity to sun	Signs of acute glomerulonephritis	Leukocytosis		
	Involvement of medium and small arteries	Increased sedimentation rate		
		Albuminuria		
		Red blood cells in urine		

sus, scleroderma, dermatomyositis, and periarteritis nodosa. Recently, however, certain drugs have been used with promise of at least partial success. For example:

1. Bistrimate has been used with some remarkable success in treatment of scleroderma and dermatomyositis, and may possibly be of some value in disseminated lupus erythematosus.

2. Para-aminobenzoic acid is credited with favorable therapeutic response in treatment of disseminated lupus erythematosus.

3. A sulfapyridine-azo-salicylate compound may afford a new approach to such debilitating diseases as rheumatoid arthritis and ulcerative colitis.

In referring to Table I, listing usual symptoms found in several representative members of the collagen group, it may be seen that certain symptoms, signs, and laboratory findings are common in most of them. The most common are:

1. Fever.
2. Painful, and often swollen, joints.
3. Malaise and weakness.
4. Skin changes.
5. Red blood cells and albumin in the urine.

In patients with fevers of undertermined origin, it might be well to keep in mind the above conditions, not only from the standpoint of a complete diagnosis, but because newer more effective treatments are being described.

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# Acute Myocardial Infarction

By H. Lyman Abbott, M.D., and  
Robert A. Gerisch, M.D.

Detroit, Michigan

WE WISH to present a case history illustrating an acute anterior myocardial infarction occurring in a white man aged twenty-one years and two months. Our purpose is to emphasize once again that it is possible to see a true myocardial infarction in a patient regardless of his or her age.

## Case Report

Mr. F. J. T. (No. 377447), a twenty-one-year-old white man, entered Harper Hospital on February 24, 1948, with the main complaint of severe constricting pain throughout his thorax, with radiation, associated with tingling, to both shoulders and down the medial aspect of both arms and forearms to the wrists. This symptom was associated with marked dyspnea and profuse perspiration. The acute episode had commenced approximately one hour prior to admission while he was walking slowly back to his work, following the eating of a very light lunch.

His past history revealed that he had always enjoyed the best of health and that during World War II he had served two years in the South Pacific Theater with the United States Navy. During the taking of a careful history, he did relate that on approximately January 15, 1948, he experienced an acute constricting-type of pain over the precordium while riding in an automobile. This pain was severe enough to produce profuse perspiration and a moderate degree of dyspnea. However, since the episode abated spontaneously after about fifteen minutes' duration, he did not consult a physician and had no recurrence until the onset of the present episode necessitating his hospitalization.

His previous diseases were the usual childhood ailments with the addition of scarlet fever. His habits were essentially normal except for the excessive smoking of cigarettes over the previous five years. His occupation was a "stoker-repairman."

The patient's familial history revealed no known hereditary disease. His father was living and was 70 inches (177.8 cm.) in height and weighed 190 pounds (86.2 kg.). His mother was living and was 66 inches (167.6 cm.) tall and weighed 140 pounds (63.6 kg.). The patient's paternal grandfather was 74 inches (187.9 cm.) in height and weighed 210 pounds (95.4 kg.). His maternal grandfather was 72 inches (182.8 cm.) tall and weighed 200 pounds (90.9 kg.).

Admission physical examination showed that the pa-

tient was a young white male, 73 inches (185.4 cm.) in height and weighing 200 pounds (90.9 kg.). He was in acute pain, complaining of severe constriction throughout his entire thorax. His blood pressure was 140 systolic and 90 diastolic; his pulse rate was 104 per minute and of regular rate. His oral temperature was 36.5 degrees Centigrade and his skin was cold and moist. Moderate dyspnea was evident and he appeared very apprehensive. He had been given intramuscularly two doses of 0.015 gm. of morphine sulfate approximately one-half hour prior to admission. These injections had no apparent effect upon his precordial pain. The remaining findings were essentially normal, with the exception of slight tenderness over the gall-bladder region in the right upper quadrant of the abdomen.

A tentative diagnosis of acute myocardial infarction was made, but a possible acute cholecystitis had to be ruled out. The pain subsided immediately on the administration of 0.03 gm. of papaverine hydrochloride intravenously.

The routine laboratory findings on admission were: an erythrocyte count of 4,740,000; hemoglobin of 15 gm. by the Sahli method; a leukocyte count of 7,400 with an essentially normal differential count. The urine was yellow, acid reaction, specific gravity of 1.027, with a 2-plus albumen, and microscopical study revealed an occasional hyaline cast per high power field. The admission blood chemistry revealed a negative Kahn test, a non-protein-nitrogen level of 36 mg., blood sugar of .117 mg., a cholesterol of 183 mg. and cholesterol ester of 109.5 per cent. The icteric index was 8 units, and the total serum protein was 7.54 mg.

On the following day the patient's temperature rose to 38.6 degrees Centigrade orally, and his pulse to 120 per minute with an occasional extra-systole. The blood pressure had dropped to 114 systolic and 78 diastolic. The urine was essentially normal, with no albumen or casts, as was noted on admission. A portable chest film was essentially normal, and an electrocardiogram showed a slight right axis deviation, a rate of 130 per minute, a P-R interval of .12 seconds, QRS component of .06 seconds, a  $Q_1$  and  $Q_4$  with elevation of  $ST_1$  and  $ST_4$  and depressed  $ST_3$ . The T wave in standard limb lead 1 and chest lead  $CF_4$  were diphasic, and an occasional ventricular extra-systole was present. A diagnosis of acute anterior myocardial infarction was made. On the second of March, 1948, another electrocardiogram showed a definite inversion of the T wave in  $CF_4$ . The sedimentation rate on the latter date was 38 mm. per hour. On the fourteenth day the blood pressure was 95 systolic over 50 diastolic. This was the lowest level recorded while the patient was in the hospital.

Figure 1 illustrates the electrocardiogram taken on March 3, 1948, eight days following the acute myocardial insult. Its interpretation is as follows: "Regular sinus rhythm. Right axis deviation. Ventricular extrasystoles seen earlier are no longer present. P waves normal. P-R .15 sec., QRS .08 sec.,  $R_2$  and  $R_3$  notched, fair sized  $Q_1$ .  $T_1$  diphasic with sharply inverted point.  $T_2$  nearly isoelectric,  $T_3$  diphasic in opposite sense. Marked elevation and arching of S- $T_1$ . S- $T_3$  depressed. AVF confirms right axis deviation with well developed

From the Department of Internal Medicine, Harper Hospital, Detroit, and 970 Fisher Building, Detroit.



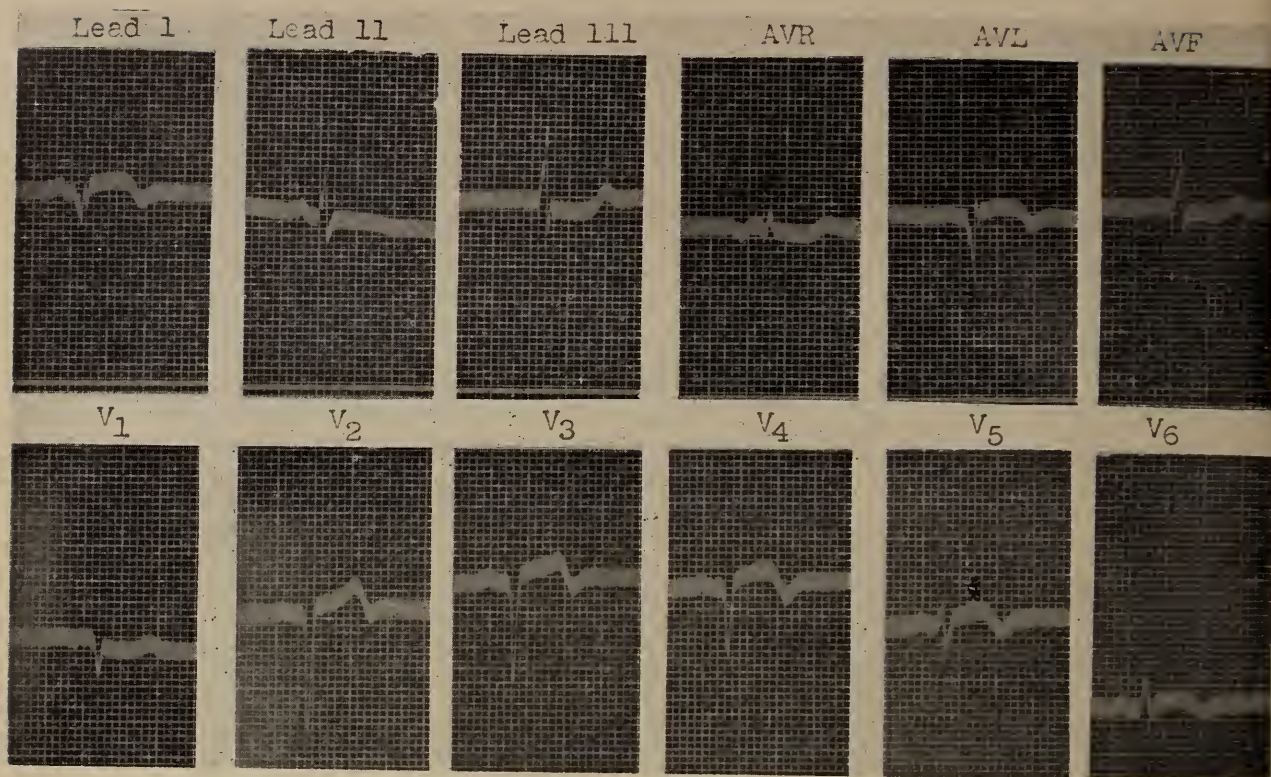


Fig. 1. Patient F.J.T. Electrocardiogram taken on March 3, 1948.

R, while AVL shows large Q and almost no R.  $V_1$  through  $V_4$  show no R wave.  $V_5$  shows small R,  $V_6$  moderate R with no preceding Q. In  $V_1$  and  $V_2$  the T is erect, and in  $V_3$  to  $V_6$  the T is diphasic, maximum and pointedly inverted in  $V_5$ . The diagnosis: A large recent anterior myocardial infarction which, since the curve of February 25, 1948, has begun to enter the regressive phase.”†

This patient made an uneventful recovery and has since been transferred to the Detroit Marine Hospital for his continued convalescence.

### Comment

We are happy to be unable to report the autopsy evidence, as this patient is making an uneventful recovery with the usual medical care, including dicumerol therapy. However, our evidence to support the clinical diagnosis is based on the clinical history, the physical examination at the time of admission, the elevation in body temperature during the first four days of admission following the acute episode, the elevated sedimentation rate, and three separate electrocardiograms, one of which is reproduced in Figure 1.

It is significant to emphasize the history of the previous precordial pain occurring at five weeks

prior to the onset of the acute symptoms necessitating hospitalization. This finding lends support to a diagnosis of a thrombosis and not to an acute embolus to the coronary vessel.

Since Herrick<sup>4</sup> in 1912 first described the clinical picture of obstruction of the coronary arteries, much has been written concerning the etiology. In our patient, the only detectable etiological factors were obesity, excessive physical exertion, a history of being a very excessive smoker, and a familial background of obesity and tallness. The latter could lead one to think of a hereditary trait of hyperpituitarism.

Mintz and Katz<sup>7</sup> in 1947 recently reviewed 572 cases of recent myocardial infarction in reference to sex, age, mortality, seasonal incidence, precipitating causes, et cetera. Their youngest patient was thirty-two years of age.

In 1937, Glendy and associates<sup>3</sup> concluded, in their comparison of 100 patients under forty years of age with 300 patients past eighty, that 1.7 per cent of all coronary disease occurs in persons under forty years of age and that the electrocardiographic observations were the same in both groups, but there were fewer conduction defects in the younger group. They also pointed out the fact that of the younger group, approximately

†Official interpretation of this electrocardiogram was made by E. D. Spaulding, M.D., chief of the Department of Cardiology, Harper Hospital, Detroit, Michigan.



70 per cent were robust to greatly over-weight by all present standards.

Master and associates<sup>5</sup> in their review in 1939 of 500 cases of coronary occlusion, of which the youngest was twenty-seven years of age and thirty-nine of their cases ranged from twenty-seven to thirty-nine years of age, concluded that the susceptibility of young persons to coronary sclerosis and occlusion could not be attributed to rheumatic fever, syphilis, diabetes mellitus, hypertension, nor any familial or hereditary trait. They also concluded that cardiac enlargement and cardiac failure increased with the age of the patient, being uncommon in the young.

Clawson<sup>2</sup> in 1939 reported an analysis of 928 cases of coronary sclerosis, of which the youngest was twenty-two years of age. He stated that hypertension is the suggestive etiological factor in coronary sclerosis. He also emphasized that severe coronary sclerosis is often seen without any evidence of hypertension. Effort was not a conspicuous factor, in that at least 75 per cent of those cases expiring did so while at rest in the hospital or elsewhere.

Sleigmann and Slanner<sup>9</sup> in 1946, reporting the cases of acute myocardial infarction occurring in men below the age of forty years, in the armed forces of the United States, concluded that strenuous effort had been noted to be the causative factor in the majority of cases.

Brocks<sup>1</sup> reported in 1941 a twenty-year-old man in whom a coronary occlusion occurred due to a hemorrhage into the arterial wall, with secondary thrombus formation.

Zacks<sup>10</sup> in 1943 reviewed the literature and found eight cases of coronary thrombosis occurring in patients between the ages of ten and twenty years. He added one of his own, bringing the total number up to nine.

Miller and Woods<sup>6</sup> in 1943 reported a fatal coronary thrombosis in a man aged twenty-two years.

Ramsay<sup>8</sup> in 1931 reported a case of coronary thrombosis found in an infant only four months of age.

### Conclusion and Summary

We have presented a case history with clinical and laboratory evidence of an acute anterior myocardial infarction occurring in a white man aged twenty-one years and two months.

(Continued on Page 351)

## Perforation of the Rectosigmoid Due to Benign Tumors

### Report of Two Cases

By Thomas C. Arminski, M.D.

Detroit, Michigan

IT HAS ONLY BEEN in recent years that the benign tumors of the intestinal tract have come to occupy a prominent position among diseases of the digestive system. Various histologic types of tumors have been reported; namely, angiomas, myomas, fibromas, lipomas, and adenomas. Lewis, in 1906, reviewed the various case reports and found that among 208 cases fifty-three were located in the small intestine, fifty-four in the colon and appendix, and 101 in the rectum. Descoudres found that in eighty cases of myomas of the intestinal tract, sixteen were in the rectum. The common complications of these lesions are obstruction, intussusception, inflammation, hemorrhage, and malignant changes. Although perforation of the intestinal tract due to benign tumors has been mentioned as possible, no reports of this complication could be found in the literature. Turner, Grant and Murray, Weinberger, and Koucky and Beck, discussing perforations of the colon and rectum, list diverticulitis, cancer, and trauma as the most frequent causes.

It must be presumed that perforations of the large intestine secondary to benign lesions have occurred, but that these have not been reported. It is with this purpose that I present two cases which exemplify an additional complication of benign tumors of the intestine, and an additional etiological factor in perforation of the large bowel.

### Case Reports

*Case 1.*—(No. 93570) A sixty-eight-year-old white man, a factory worker, was admitted to The Grace Hospital on June 2, 1946. He had been perfectly well until eight hours prior to admission to the hospital, when he was seized with a sudden severe lower abdominal pain. After the onset of the pain, he vomited once and had one bowel movement, which was normal in color and consistency. There had been no melena, jaundice, weight loss, nor change in bowel habit. An appendectomy had been performed nineteen years previously.

On admission, the patient was acutely ill, and slightly cyanotic. The temperature was 100.4°; pulse rate, 140

From the Department of Surgery and the Department of Pathology, Grace Hospital. The author of this paper completed his residency in surgery on January 1, 1949.





Fig. 1. Case 1. A photograph of the perforation at the rectosigmoid junction.

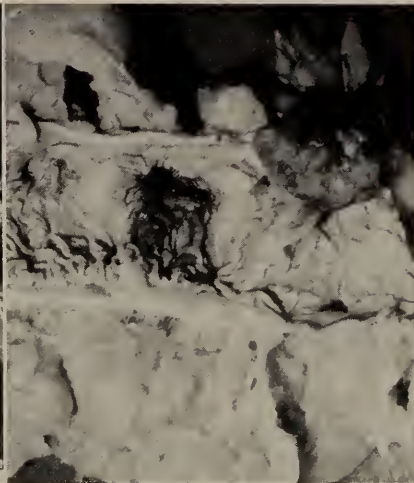


Fig. 2. Case 1. A photograph illustrating the perforation and the polyp within the lumen of the rectosigmoid.



Fig. 3. Case 1. A photograph illustrating the polyp as found at autopsy outside the lumen of the bowel.

per minute; and the blood pressure, 62/40. The abdomen was slightly distended, and there was a moderate generalized rigidity over the lower quadrant. No abnormal masses were palpated. The peristalses were generally hypoactive, and a suspicious fluid wave was present. On rectal examination, no pathologic condition was found. The patient was given 1,000 c.c. of intravenous fluid and 2,500 c.c. of plasma soon after admission, but his condition was critical, and he expired in eight hours.

The autopsy demonstrated the presence of 2,000 c.c. of cloudy, dark, foul-smelling free fluid within the peritoneal cavity. The entire small and large intestines were markedly congested, and covered with a fibro-purulent exudate. The entire small bowel, cecum, ascending and transverse colon exhibited no gross pathologic conditions except moderate distention and congestion of the serosa. At the rectosigmoid junction there was an ovoid-shaped perforation measuring 3.5 cm. by 2.5 cm. Projecting through this perforation and extending into the peritoneal cavity was a polyp measuring 2 cm. by 1.5 cm. in size. It was attached to the mucosal surface by a pedicle 3 cm. in length and 8 mm. in diameter. The mucosa and bowel wall at the periphery of the perforation were congested, ulcerated, and gangrenous. Microscopic examination showed that the rectal polyp was composed of atypical glandular tissue without any undifferentiation. There was a marked vascularity and a considerable amount of polymorphonuclear cell infiltration. The intestinal wall in the vicinity of the perforation exhibited local necrosis and a considerable amount of polymorphonuclear cell infiltration. Numerous sections through the polyp and the bowel wall showed no malignancy.

**Case 2.**—(No. 110382) A seventy-year-old white man was admitted to The Grace Hospital on June 4, 1947. This patient had had rectal trouble for thirty years. During this time, he had had several hemorrhoidectomies, excision of rectal fistulae, and incision and drainage of peri-rectal abscesses.

The temperature was 97°; pulse rate, 74 per minute;

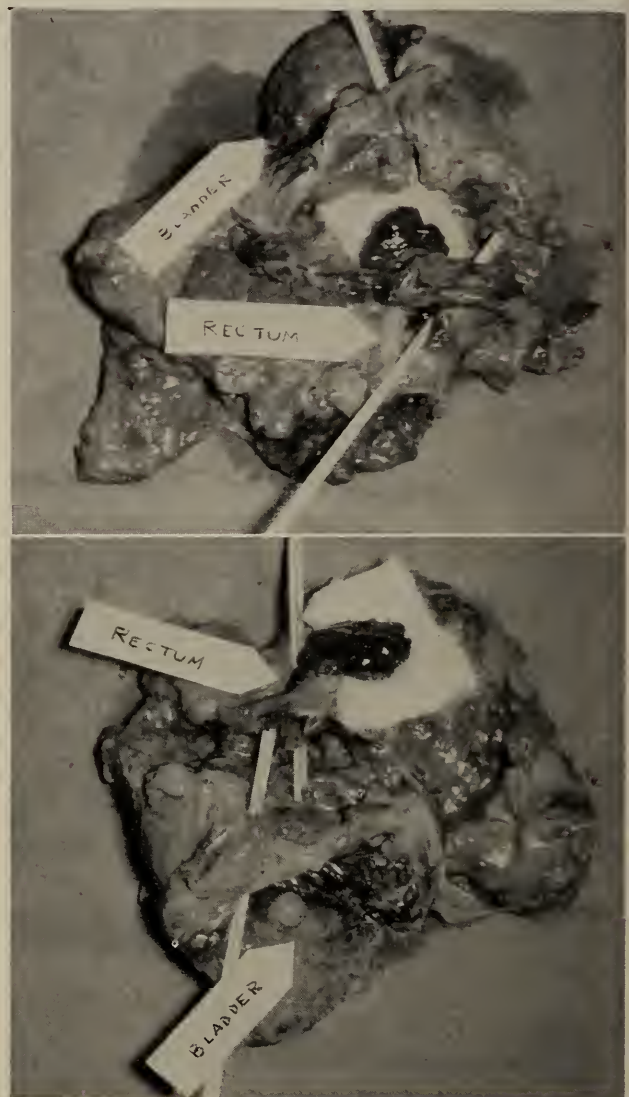


Fig. 4. (above) Case 2. A photograph illustrating the perforations of the bladder and rectum, and the polyp lying outside the lumen of the bowel.

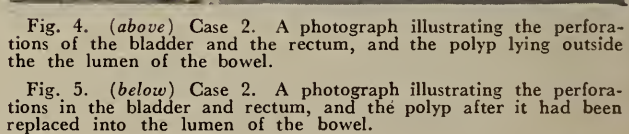


Fig. 5. (below) Case 2. A photograph illustrating the perforations in the bladder and rectum, and the polyp after it had been replaced into the lumen of the bowel.



and blood pressure, 95/55. Rectal examination revealed large thrombotic external hemorrhoids and a relaxed external anal sphincter. The gluteal and perineal areas were scarred and indurated. An indefinite mass was palpable within the lateral rectal wall. On the fifth hospital day, the urine was dark and contained a considerable amount of sediment. On the seventh hospital day, the peri-anal abscesses were drained by two wide para-anal incisions. The course of the patient was uneventful until the twentieth hospital day, when he commenced complaining of severe right lower-quadrant pain. Soon after this, there was a peripheral vasomotor collapse, and the patient expired.

The autopsy revealed 200 c.c. of dark brown, foul-smelling, free fluid within the peritoneal cavity. The visceral surfaces of all the organs were covered with a fine, granular, fecal-like sediment. The small and large bowels were moderately distended. In the pelvis there was a mass measuring 12 by 15 cm. in size, involving the rectum and urinary bladder. As the rectum was opened along its posterior longitudinal axis, it was seen that there were two perforations through the anterior rectal wall. The more distal perforation measured 2 cm. in diameter and was located about 10 cm. from the anus. This perforation communicated with an abscess cavity which was present in the pelvis and involved the rectum, urinary bladder and the pouch of Douglas. Three centimeters proximal to this perforation, there was another, measuring 1.5 cm. in diameter and communicating with the same abscess cavity in the pelvis. Hanging through this more proximal perforation and lying within the abscess cavity outside of the rectal wall was a pedunculated polyp. This polyp arose from the anterior rectal wall 1 cm. proximal to the perforation. It measured 2.5 cm. by 3 cm. in size and was attached to the rectal wall by a pedicle measuring from 7 to 10 mm. in diameter and 3 cm. in length. The polyp was soft and the mucosa was purplish-red and ulcerated. As the polyp projected into the abscess cavity, it rested against the posterior wall of the right side of the urinary bladder. The wall of the urinary bladder adjacent to the polyp was discolored reddish-blue; it was indurated, and there was a perforation through the wall communicating with the abscess cavity. Microscopic examination of the rectal wall in the region of the perforation showed that there was a complete necrosis of the wall. The rectal polyp was composed of somewhat atypical glands. The glands were dilated and formed large cystic spaces filled with mucin. Within the stroma there was a marked inflammatory cell infiltration, hyperemia, and edema. Numerous sections revealed no malignancy. Sections of the urinary bladder showed extensive inflammatory cell infiltration, hemorrhage, and necrosis of the bladder wall.

### Comment

While traumatic, inflammatory, and malignant lesions are responsible for a large proportion of the perforations of the large bowel, benign lesions, if allowed to progress, may terminate with this serious complication. The possibility that benign tumors may become malignant has increased the

incidence of their diagnosis. This possibility, together with the complications of obstruction, or perforation, makes it imperative that every effort be made to diagnose their presence. Case 2 portrays an example of a benign lesion which, although not degenerating into a malignancy, terminated fatally. One may assume that this lesion was present for some time and should have been visualized easily by means of a sigmoidoscopic examination.

### Summary

Two case reports of benign tumors of the large intestine causing perforation of the large bowel have been presented.

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## ACUTE MYOCARDIAL INFARCTION

(Continued from Page 349)

We have briefly reviewed the literature to point out the low incidence of this pathological condition occurring at that age, but also to emphasize that a possible myocardial infarction should always be considered in any patient, regardless of age, whenever the clinical findings warrant such a conclusion.

We wish to acknowledge our gratitude to Dr. E. D. Spaulding and the entire Department of Cardiology of Harper Hospital for aid in obtaining and interpreting the electrocardiograms.

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# Aureomycin in Dendritic Keratitis

## Case Report

By H. B. Appelman, M.D., and  
Arthur S. Hale, M.D.

Detroit, Michigan

AUREOMYCIN, a newcomer among the antibiotics, is rapidly becoming established as a valuable therapeutic agent.<sup>1</sup> Derived from a strain of streptomyces aureofaciens, it is available as the yellow crystalline hydrochloride salt, soluble in distilled water, but somewhat less soluble in isotonic sodium chloride solutions. These solutions are acid (pH 4-4.5). The activity of aureomycin deteriorates rapidly in alkaline solution at room temperature.<sup>2</sup> Its toxicity is low and it can be used orally, parenterally or topically against a wide variety of Gram-positive and Gram-negative organisms that are resistant to penicillin or streptomycin.

Experimentally, infections with rickettsias and the viruses of the psittacosis-lymphogranuloma venereum group appear to yield promptly.<sup>4</sup> Favorable response has also been noted in the oral or parenteral treatment of Rocky Mountain spotted fever,<sup>2,3,5</sup> infections of the urinary tract due to *Escherichia coli*,<sup>2</sup> brucellosis,<sup>2,6</sup> typhoid fever,<sup>2,4</sup> gonococcal urethritis, pneumococcal pneumonia, meningococemia, nonspecific urethritis,<sup>4</sup> and lymphogranuloma venereum.<sup>7</sup>

Braley and Sanders<sup>1</sup> administered aureomycin locally as a 0.5 per cent solution of a borated salt, having a pH of 7.5 to 7.8 when dissolved in isotonic sodium chloride solution.\* It was only mildly irritating to the noninflamed conjunctiva, entirely nonirritating to the inflamed conjunctiva.

They found that aureomycin borate is effective in 0.5 per cent concentration against staphylococci, pneumococci, influenza bacilli and inclusion conjunctivitis; that it appears to be effective in cases of Mooren's ulcer and atypical Mooren's ulcer of unknown cause; that it has some effect in epidemic keratoconjunctivitis provided treatment is started before the fourth day; and that it may be

of value in dendritic keratitis which is believed to be a virus infection causing dendritic superficial ulceration of the cornea. This latter suggestion prompted us to use aureomycin in a patient with persistent bilateral dendritic keratitis in whom at times as much as two-thirds of the cornea was superficially ulcerated.

## Case Report

A thirty-two-year-old white woman first complained of blurring of vision in October, 1944, followed in November by lacrimation, photophobia, blepharospasm and ciliary spasm. A definite scratchy sensation and pain ensued. During the preceding four months there were headaches, generalized neuritic pains, paresthesias of the fingers and arms, intercostal neuralgia and diarrhea. Physical examination showed no abnormality except dendritic keratitis of the eyes with ulceration.

Treatment for this persistent condition during the next four years ranged through the gamut of old and new. Dionine was frequently resorted to for the pain. The ulcers had been treated with iodine, the mercurials silver nitrate, sulfa-ointments, penicillin locally and intramuscularly, tyrothricin drops, and baciguent ophthalmic. Relief was partial only after cauterization followed by dionine, but there always remained some discomfort and there was frequent recurrence of ulcers.

On December 6, 1948, during an acute flare-up of the keratitis, aureomycin ophthalmic solution was started, using two drops in each eye every two hours, except during sleep. Within two days the symptoms were well controlled. The dosage was then increased to four drops every two hours and has been so continued to the present. There have been no further symptoms, and no ulcers have occurred since treatment was started. The eyes exhibit no inflammatory changes, although superficial roughness of the corneal epithelium is demonstrated by staining with fluorescein.

To all appearances, aureomycin has effected a result not obtained by any other known treatment during a period of four years.

## Summary

Dendritic ulcerations of the cornea in a thirty-two-year-old white woman, that had resisted all forms of treatment during a period of four years, were apparently arrested through the use of aureomycin topically applied in a 0.5 per cent solution. 10 Witherell St.  
Detroit, Mich.

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(Continued on Page 392)

\*From the Medical and Ophthalmological Departments of Harper Hospital.

\*The borated salt is stable in the powder form but unstable in solution, although it retains most of its activity when kept at 4° C. In solution, particularly at room temperature, the activity of the drug disappears in approximately twenty-four hours.

# Unusual Gastrointestinal Diseases

## Röntgenological and Clinical Studies in Eight Cases

By Hugh Caumartin, M.D.  
Detroit, Michigan

**I**N DIAGNOSTIC roentgenology of the alimentary canal, the criteria of inflammation, ulceration, neoplasm, and disturbed function are readily recognized when clear cut.

It is essential that the radiologist approach each case without prejudice, regardless of the clinical

### Case Reports

*Case 1.*—(Courtesy of Drs. D. R. Coyne and L. R. Hubbard). E. S., a white woman, aged fifty-one, gave a seven-month history of dull, aching pain in the right upper abdominal quadrant, associated with severe flatulence and belching. There was some relief of pain on eating bland food. She had had no jaundice, fever, acholic stools, dark urine, and no food dyscrasias. The physical examination, except for slight right upper quadrant tenderness, revealed no pertinent findings. A complete blood count, urinalysis, and cholecystographic studies were within the range of normal. The clinical impression tended toward the assumption of a psychogenic gastrointestinal dysfunction. However, gastrointestinal studies on July 30, 1947, showed deficiencies in the base of the duodenal bulb which were characteristic of protrusions of redundant, prolapsed, gastric mucosa (Fig. 1, A).

Subsequent to this diagnosis the patient was discharged

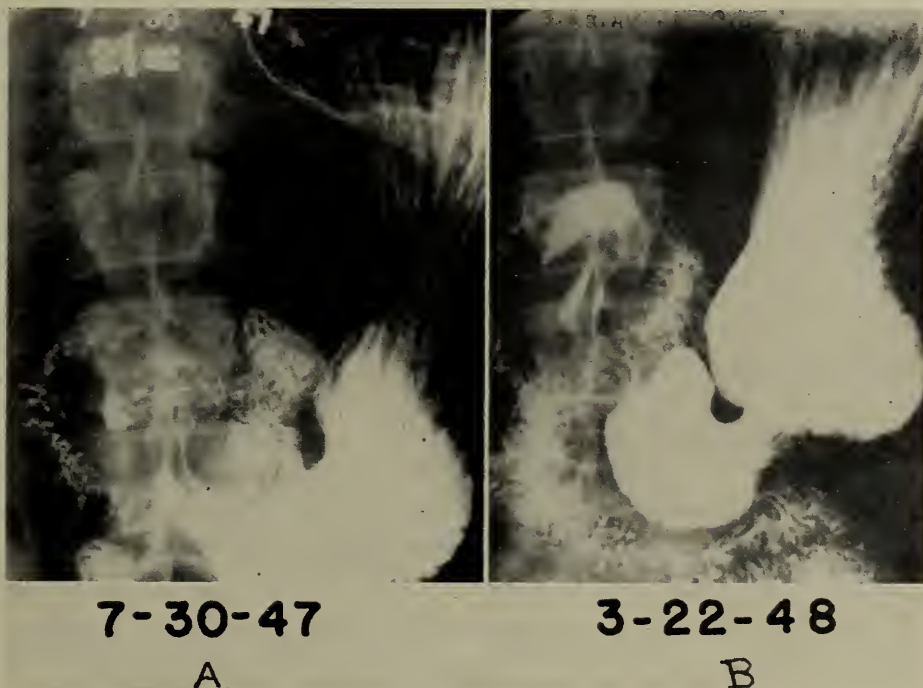


Fig. 1. Prolapse of redundant gastric mucosa. (A) Preoperatively, revealing the characteristic deficiencies in the base of the duodenal bulb. (B) Postoperatively, showing irregularity in the antral mucosal pattern, but reduction in the amount of prolapse of gastric mucosa.

impression, in order to observe objectively any abnormal features and evaluate them on their own demonstrable merits.

We present a group of observations illustrating diagnostic difficulties and unusual conditions requiring an objective approach for a reliable analysis, and for guidance of the referring clinician. Radiologic examinations described were performed by, or under the direction of Dr. H. A. Jarre, except where noted otherwise.

From the Department of Radiology, the Grace Hospital, Detroit, Michigan. The author of this paper is a resident in radiology.

from the hospital and placed on a medical regime. Her symptoms continued. On August 13, 1947, she was readmitted to the hospital for surgical care. At the laparotomy, the pyloric mucosa was examined and found to be redundant. Three spiral strips of this redundant mucosa were removed from the ventrally accessible gastric antrum, somewhat in the form of a modified pyloroplasty. The patient was discharged from the hospital on September 2, 1947, after an uneventful postoperative course. She has since been symptom-free.

On radiologic re-examination approximately six months later (March 10, 1948), considerable irregularity of the antral mucosal structure was observed and a small residual prolapse of gastric folds from the posterior cir-



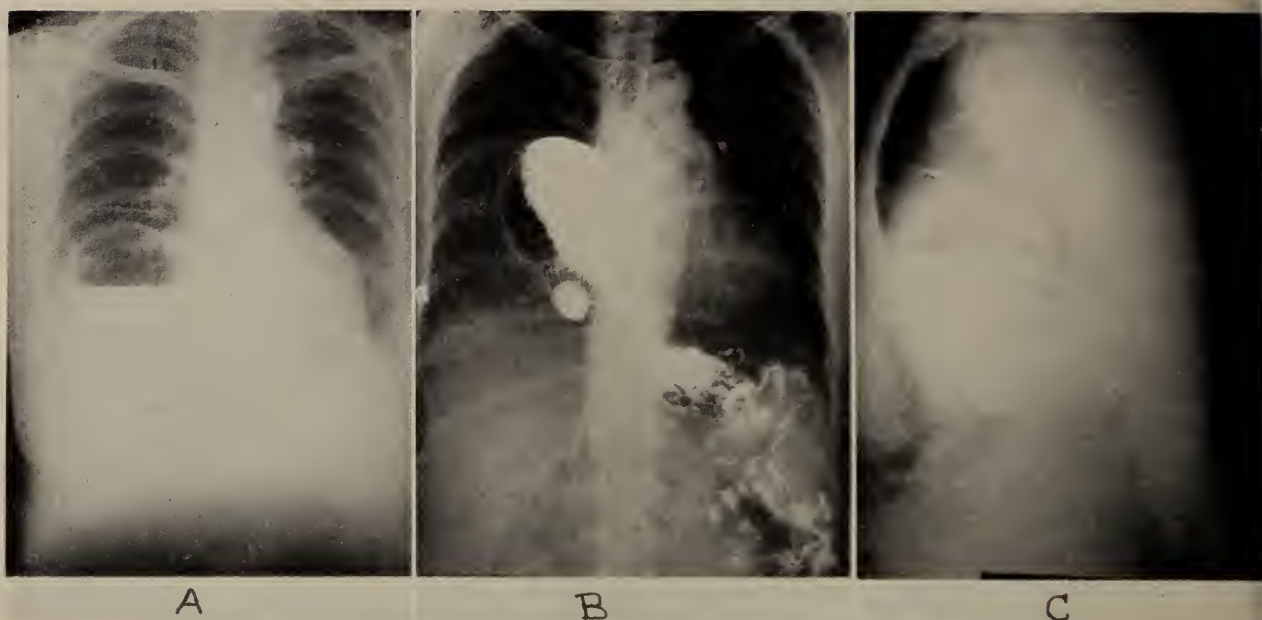


Fig. 2. Diaphragmatic hernia through foramen of Morgagni. (A) As seen in chest roentgenogram. (B) After ingestion of barium; the stomach and duodenum are seen in the right hemithorax. (C) Lateral view.

cumference was ascertained, though the patient complained of no recurrent distress (Fig. 1,B).

*Discussion.*—Prolapse of redundant gastric mucosa into the duodenum has been the subject of quite extensive studies by Dr. Wendell Scott.<sup>8</sup> In a series of 1,346 successive roentgen examinations of the upper gastrointestinal tract he found fourteen such cases. Thus, this condition occurred as frequently as gastric ulcer. It is demonstrable only on radiologic examination. On surgical exploration the mucosa is found unusually loosely attached to the underlying tissue so that prolapse through the pyloric valve occurs easily—in a manner similar to prolapse of rectal hemorrhoids.

There are no signs and symptoms characteristic enough to permit a diagnosis on a purely clinical basis,<sup>8</sup> so recognition of the condition must be based on a radiologic examination and is usually entirely unexpected. A diagnosis, however, should lead to decisive intervention, though the mode of treatment might be open to surgical debate.<sup>6</sup>

*Case 2.*—(Courtesy of Dr. Earl G. Krieg). A. F., a white woman, aged fifty-nine, had had an ileo-transverse colostomy on March 3, 1942, because of acute intestinal obstruction. This was due to an intussusception at the hepatic flexure of the colon caused by an intraluminal tumor. Two months later the ascending colon was resected and the tumor was histologically diagnosed as a lipoma. After this the patient was well until November 14, 1942, when she had a sudden onset of cramping upper abdominal pain, associated with nausea and vomiting.

A gastrointestinal study shortly after the onset of complaints demonstrated the stomach and duodenum to be located in the right hemi-thorax (F. C. Jewel, M.D., Cottage Hospital, Grosse Pointe, Michigan). This was an entirely unsuspected condition, unrelated to the patient's previous disease. The existence of a diaphragmatic hernia, through a defect located anteriorly and near the mid-line (i.e., through the foramen of Morgagni) was obvious (Fig. 2).

*Discussion.*—Diaphragmatic hernias are rarely diagnosed without roentgen examination.<sup>3</sup> The clinical manifestations of this condition are of infinite variety. The signs and symptoms depend on the viscera involved and the resulting disturbance in function. Thus, if the stomach is chiefly involved, there is usually epigastric distress, dysphagia, belching, nausea and vomiting; sometimes there is marked nausea with inability to vomit. If colon or small bowel is involved, symptoms such as distention, colicky pain, constipation, nausea and vomiting may occur, i.e., a picture of partial obstruction. If herniation is great enough to cause pressure on the heart and lungs, the patient may complain of palpitation, dyspnea, thoracic pain; sometimes of attacks of cyanosis, anginal type of pain, hemoptysis, et cetera. Physical examination may reveal nothing or may reveal marked and perplexing signs.<sup>5</sup>

Drs. Harrington and Kirklin,<sup>3</sup> in their review of 131 cases of diaphragmatic hernia, call the condition a "masquerader" because the symptoms so

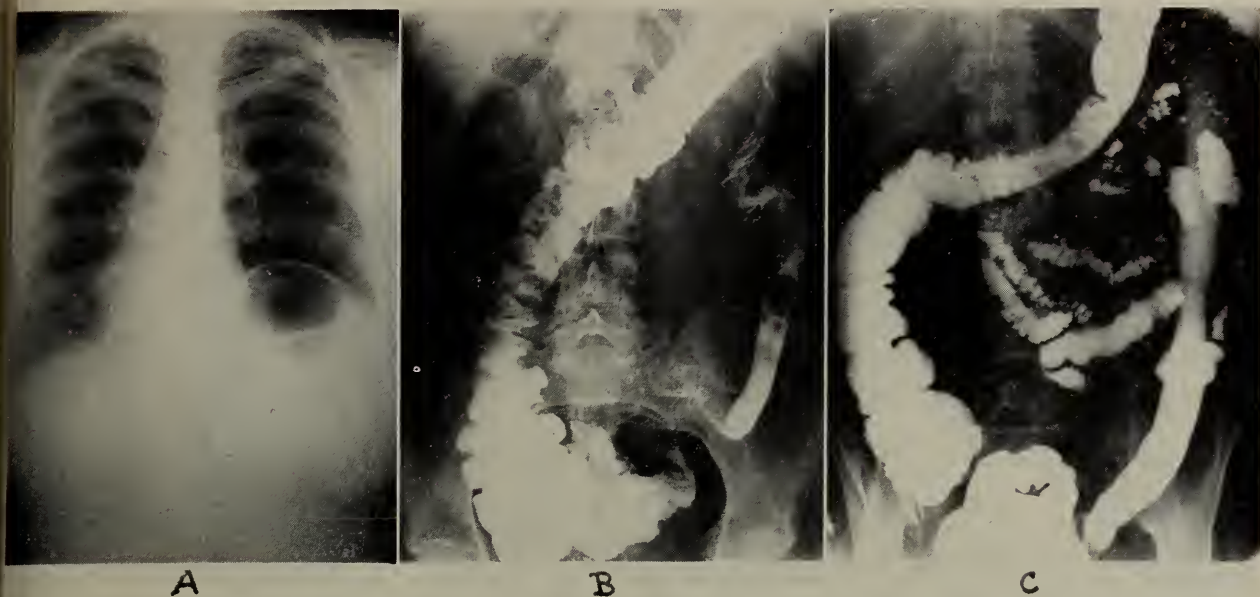


Fig. 3. Internal abdominal hernia through mesocolon transversum. (A) Chest x-ray, demonstrating an eventration of left hemidiaphragm (an incidental observation). (B) After a barium enema, dilated loops of small bowel are seen to the right of the colon. (C) Intestinal studies, one week later, demonstrate normal location of small bowel loops after spontaneous reduction of the herniated small bowel.

frequently simulate other disease processes. In their series they found that, on an average, three erroneous clinical diagnoses were made on each case before the existence of the hernia was established, and twenty-one patients underwent various surgical operations (appendectomy, cholecystectomy, et cetera) without relief of symptoms. On the other hand, roentgen examination will readily reveal this anatomic malformation and the disturbed function.<sup>4</sup> The examination should attempt to determine not only the existence of the hernia and the viscera involved but, as far as possible, the size and situation of the diaphragmatic defect.

Treatment is surgical: reduction of the herniated viscera and repair of the diaphragmatic defect. The value of accurate diagnosis and subsequent surgical repair is well appreciated, when we realize that many of these patients can be cured. In one series of 113 operations, 110 patients were relieved of symptoms, while in only three cases did hernia and symptoms recur.<sup>3</sup>

In the case of the patient discussed, original surgical interference was required for acute intestinal obstruction. Whether or not diaphragmatic hernia existed at that time we do not know.

*Case 3.*—(Courtesy of Dr. Earl G. Krieg). M. A., a forty-five-year-old woman, came to our attention in November, 1946, when we were requested to review roentgenograms obtained at another institution. At that

time this patient gave a four-year history of intermittent attacks of acute left upper abdominal pain. Each attack began with bloating in the left upper quadrant, followed by severe cramps, then vomiting, and finally diarrhea. These episodes would last for from two to eight hours, cease spontaneously, and the patient would feel perfectly well during the intervals. However, the attacks had been gradually becoming more frequent, more severe, and, during the last one, there had been an emesis of about one ounce of blood.

Radiologic examination at another hospital had revealed the left hemidiaphragm to be 3 inches higher than the right, and stationary. It was assumed that the symptoms were related to this eventration (Fig. 3, A). In our review of these roentgen records it was noted that, in addition to the diaphragmatic eventration, there were dilated loops of small bowel located to the right of, as well as above, the hepatic flexure of the colon. This latter structure was displaced to the left and caudally, so that the small bowel loops were interposed between the colon and liver. At our request gastrointestinal studies were repeated about one week later (after all symptoms had subsided) and revealed normal relations of all abdominal viscera. The roentgenologic interpretation of these findings was that there existed an intermittent internal hernia of small bowel, probably through the mesocolon transversum (Fig. 3, B and C).

Subsequent surgical exploration, in November, 1946, revealed a 4-centimeter slit-like defect in the mesocolon transversum through which herniated, at that time, about 18 inches of jejunum. This herniated viscera apparently extended to the right side of the abdomen. The left hemidiaphragm was found to be fibrous and stationary, but apparently was not causing discomfort, because repair of the mesenteric rent has prevented any further attacks of the type experienced over the preceding years.



*Discussion.*—This case illustrates the importance of an objective, unprejudiced evaluation of radiologic features of unusual character. The importance originally attributed to the diaphragmatic

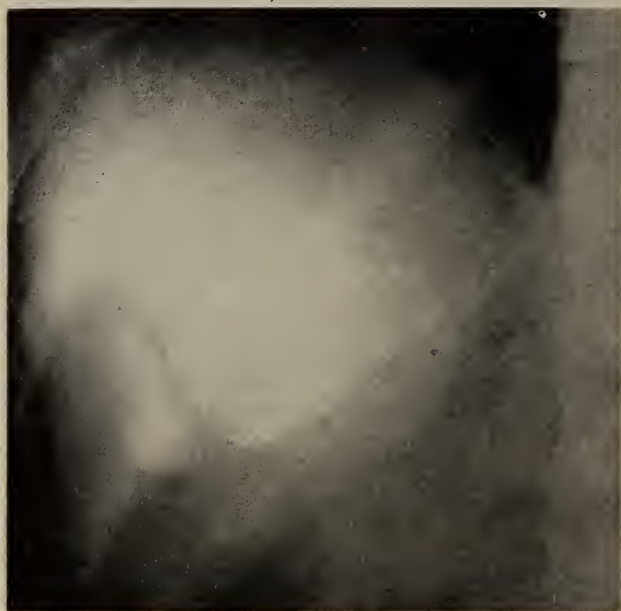


Fig. 4. Attempted cholecystographic study in a patient with gastric volvulus, demonstrating the retention of opaque material in an abnormally located stomach.

eventration had to be minimized, while the previously unobserved features of internal herniation had to be emphasized. As no material therapeutic alteration in the diaphragmatic abnormality could be anticipated, surgical exploration without previous recognition of the internal hernia probably would have resulted in no benefit to the patient, especially if, at the time of surgery, no loop of gut had been herniated. However, the radiological recognition of this very obviously intermittent and unusual intestinal derangement led to successful therapy.

*Case 4.*—(Courtesy of Drs. C. S. Kennedy and P. Burnstine). H. T., a white man, aged fifty-one, gave a ten-year history of repeated episodes of epigastric distress which resembled that due to a peptic ulcer. A so-called "upside-down" stomach had been radiologically observed elsewhere in 1938. Nothing was done at that time.

On January 30, 1947, cholecystographic studies were attempted. It was found that the contrast material stagnated, unmetabolized, in a rather large pocket overlying the right hepatic lobe (Fig. 4). It was concluded from these observations that the patient must carry some type of pyloric stenosis and abnormality of the stomach permitting this organ to assume an entirely abnormal position. A gastric volvulus was suspected. Examination of the stomach was undertaken following gastric lavages and aspirations carried out over a period of three

days, during which time essential fluid balance was maintained by parenteral administration. The suspicion of gastric volvulus of organo-axial type<sup>9</sup> was confirmed. It was associated with an intermittent pyloric obstruction. Deformities of the duodenal bulb were also observed and thought to be the result of pronounced torsion on the gastric suspension in this region. The splenic flexure of the colon, as is common in these cases, was quite distended with gas and appeared to lie anterior to the stomach. It was obvious, then, why normal cholecystographic response could not be anticipated (Fig. 5).

A laparotomy was undertaken on March 18, 1947. The stomach was found to be quite distended and the transverse colon lay directly in front of it. The stomach was rotated up to about 180 degrees, and its walls were markedly thickened. This was due, apparently, to hypertrophy in the muscular layers of the stomach, as a result of the protracted pyloric stenosis. The pylorus and duodenal bulb were apparently thickened, deformed, and matted down. These findings precluded curative surgery, without undue risk, at the pyloric and duodenal segment. A posterior retrocolic gastroenterostomy, in an iso-peristaltic manner, appeared to be the optimal therapeutic step, and was established.

The patient underwent an uneventful postoperative course and was discharged on March 27, 1947. When seen last, about twelve months later, he had no complaints.

*Discussion.*—Gastric volvulus may be more or less severe, depending on the degree of rotation of the stomach. The degree of obstruction produced likewise varies; the more marked the rotation, the more severe the obstruction.<sup>7</sup> The features of pyloric obstruction may be persistent or intermittent, depending on the degree of gastric and, especially, antral fixation. The clinical picture is confusing; the only fairly constant symptoms are upper abdominal pain and distension with nausea and vomiting. Only rarely is a mass palpated, and laboratory studies are noncontributory.<sup>2</sup> Neither the clinician nor radiologist can anticipate the condition, and the diagnosis is therefore always an unexpected radiologic conclusion, based exclusively on objective, unprejudiced observation of the gastric abnormality. Elongation and distension of the colonic flexure is commonly encountered in these patients. Its primary or secondary relationship to the entire complex has not been determined. In the case of the patient presented, failure of opacification of the gall bladder had to be attributed to stagnation of the contrast material in the stomach, rather than to primary gall-bladder disease. Subsequent studies led to a correct evaluation of the situation and a successful surgical approach.

Case 5.—(Courtesy of Drs. G. S. Fisher and J. G. Israel). A. I., a white man, aged forty-three, stated that early in January, 1948, he was seized with a sharp, deep, pain, localized in the right upper abdomen, which

ary 19, 1948. No pathological condition in chest or abdomen could be ascertained. Stool examinations showed much mucus, but no blood, pus, or pathogenic organisms. Suspicions of gall-bladder disease were entertained.

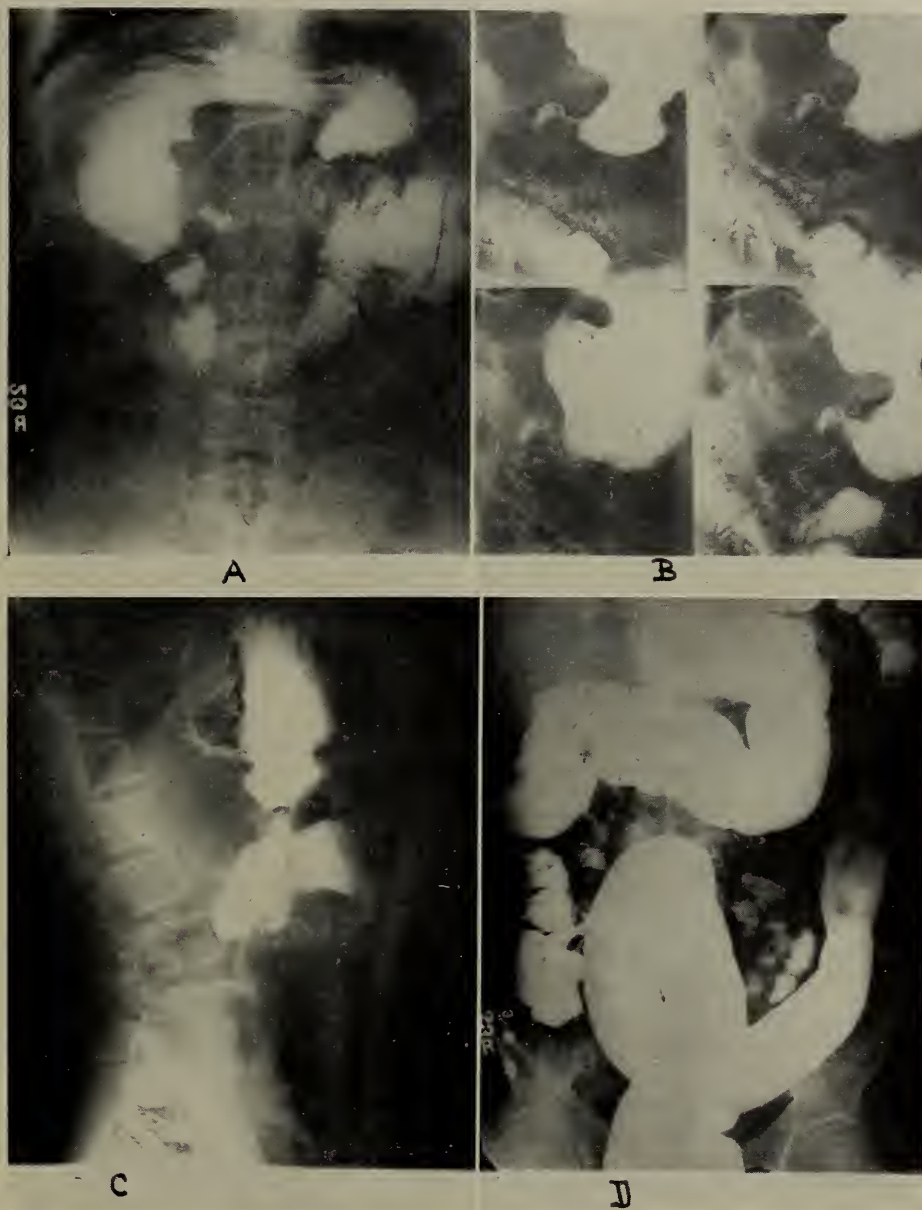


Fig. 5. Gastric volvulus. (A) Roentgenogram of the abdomen, demonstrating the rotation of the stomach; the pylorus and duodenal bulb are seen protruding toward the left. (B) Serial roentgenograms of the stomach and duodenum, demonstrating a deformed duodenal bulb. (C). Lateral view, showing the dilated colonic loops located anterior to the stomach. (D) Colon study, showing the redundant and displaced splenic flexure.

lasted about one day. Subsequently, he complained of a feeling of "pressure" in his chest. Electrocardiographic studies (Dr. L. T. Colvin) revealed no evidence of cardiac disease. He was kept under medical observation (Dr. G. S. Fisher). About two weeks later he developed nausea on ingestion of food, but had no vomiting, diarrhea, or constipation. There had never been any fever or chills.

He was admitted to the hospital for study on Febru-

Cholecystographic studies done later (March 3, 1948) confirmed this impression, demonstrating a single calculus, approximately 1 centimeter in diameter, located in a well-visualized but poorly contracting gall bladder. However, gastrointestinal studies on February 19, 1948, had revealed, at the two-hour observation, a severe structural disturbance in the terminal ileal segments: the lumen was narrowed and the mucosal pattern was distorted. The appearance was regarded as indicative of



mucosal inflammatory disease. On the following day, colon studies again demonstrated these abnormal features on reflux filling of the terminal ileum (Fig. 6, A and B).

Repeat stool examinations on March 4, 1948, re-

might have elicited the initial colic-like attack of very short duration, and might also contribute to a retarded recovery from operation.

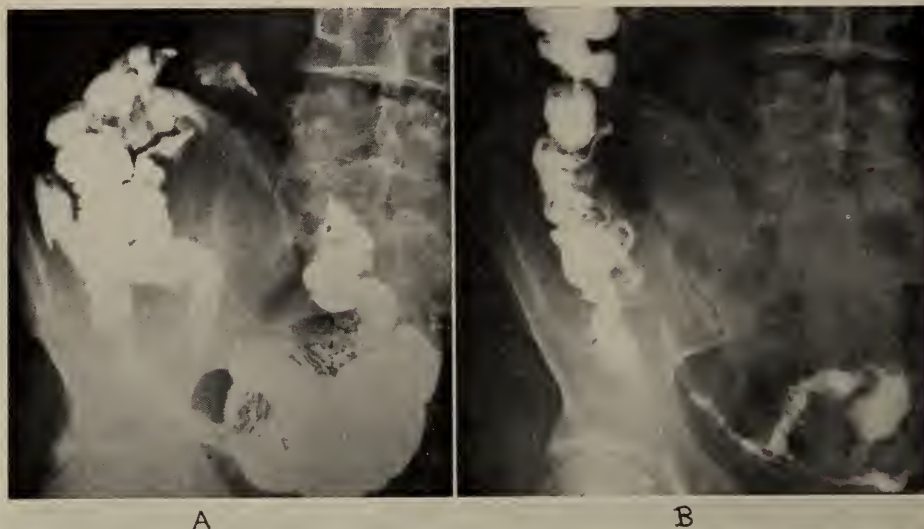


Fig. 6. Terminal ileitis. (A) Narrow deformed segment of terminal ileum as seen two hours after ingestion of a barium meal. (B) Colonic post-evacuant roentgenogram, also demonstrating the involved terminal ileum on reflux filling of this segment.

vealed not only much mucus, but also blood and pus. No acid-fast bacilli were detected. On proctoscopic examination no mucosal pathologic condition, except for minor hemorrhoids, could be discovered in accessible rectosigmoidal parts.

On March 9, 1948, a laparotomy was performed (Dr. J. G. Israel), and about 12 inches of terminal ileum were resected, this portion being very obviously inflamed and thickened. An ileocecal anastomosis was done.

On pathological examination, the mucosa of the resected ileum exhibited widespread ulceration, some of the ulcers penetrating through the muscularis mucosa. Inflammatory cell infiltration was noted to involve the entire wall of the gut. There was no evidence of tuberculosis, and no parasites were found (Dr. C. I. Owen).

At the time of this writing, the patient has not yet fully recovered from the surgical intervention and, although he has been discharged home, he continues to have some abdominal distress.

*Discussion.*—Regional enteritis most frequently involves the terminal ileum. It is usually associated with intermittent diarrhea, abdominal cramps, right lower quadrant pain, fever, anemia, and an abnormal resistance over the involved area.<sup>1</sup> This patient presented none of these signs and symptoms, and yet objective evaluation of the radiologic observations established a reliable diagnosis. A cholelithiasis also was demonstrated during the course of radiologic examinations and was considered a secondary disease at that time, though it

Five or six hour observations during gastrointestinal studies are relics of a period during which radiologic diagnoses were based so frequently on so-called "symptom complexes" and during which, also, the main emphasis was on gastric retention. With our present knowledge of gastrointestinal structure and function, normal as well as pathologic, it is essential to demonstrate objectively the structural and functional ability of the entire alimentary canal. Thus even casual observations of the small bowel at one, two, or three hour intervals after ingestion of the contrast meal are of much greater value than a five or six hour study which often shows only an incomplete and unreliable filling of the lowermost ileal segments and, perhaps, parts of the colon. It was this former type of small bowel study which led to the correct diagnosis in the case presented.

*Case 6.*—(Courtesy of Dr. R. R. Sterling). G. H., white man, aged forty, was admitted to the Northwestern Branch of the Grace Hospital on November 8, 1946. For the previous six years this patient had been under medical care for duodenal ulcer, with typical postprandial pain. X-ray examination at this hospital in September, 1944, had demonstrated a gastro-duodenitis and duodenal bulb changes "suggestive" of ulcer; cholecystographic studies at that time had revealed a non-functioning gall bladder with no discernible stones. On January 16, 1945, a cholecystectomy was done; the pathological



Fig. 7. Neoplasm of undetermined primary source (pancreas?) producing extramucosal but intramural and perimural involvement of the duodenum and first jejunal segment. Note also the increased circumference of the duodeno-jejunal curve. (A) After ingestion of barium suspension. (B) One hour later.

report was chronic cholecystitis with intramural abscess formation (Dr. D. H. Kaump). Inspection and palpation of the stomach and duodenum at the time of operation revealed no discernible pathologic condition (Dr. R. P. Reynolds).

Subsequent to operation, upper abdominal distress and ulcerlike symptoms continued.

On November 3, 1946, approximately twenty-two months after operation, the patient had a sudden onset of more severe epigastric pain which soon spread over the entire abdomen. He passed a black, tarry stool and then developed constipation. Nausea and vomiting were associated with this acute attack, but no hematemesis. Five days later, on November 8, 1946, the patient was admitted to the hospital, acutely ill. Physical examination at this time revealed tenderness and muscle spasm in the epigastric region, as well as a hard, nontender nodule palpable in this area. The blood count showed 3,950,000 red cells with 78 per cent hemoglobin, 34,050 white cells, 86 per cent neutrophils, 14 per cent lymphocytes. The admission diagnosis was penetrating duodenal ulcer.

During the following week the epigastric nodule increased in size (this was thought to be a walled-off abscess from a penetrating ulcer) and, furthermore, a second nontender nodule was palpated, this time in the left lower quadrant.

On parenteral fluids and Wangenstein suction the patient underwent a temporary symptomatic improvement and, on November 19, 1946 (eleven days following admission), upper gastrointestinal studies were done.

This radiologic examination revealed a normal stomach and duodenal bulb, but the second and third portions of the duodenum and the proximal jejunal loop presented intrinsic deformities. These were apparently produced predominantly by extraintestinal masses invading the wall of these segments, and also causing an expansion of the duodenal-jejunal curve (Dr. F. K. Wieterson). These findings were interpreted as being due to neoplastic dis-

ease of undetermined primary location, rather than to inflammatory disease. Considered, in the differential diagnosis, were metastases from a distant undiscovered source in or near the portal area, carcinoma of the pancreas with invasion of contiguous intestinal structures, and retroperitoneal sarcoma with invasion of intestinal parts (Fig. 7).

By November 20, 1946, the patient had developed palpable cervical glands. A biopsy of one of these was diagnosed as a highly malignant metastatic tumor, probably a reticulum cell sarcoma (Dr. C. I. Owen). On November 23, 1946, the white blood count was 62,000, with 90 per cent neutrophils. On November 24, 1946, the patient expired.

Autopsy revealed a tremendous mass of tumor tissue, located retroperitoneally, extending from the sacral promontory to the diaphragm. The pancreas was involved in the same mass, actual pancreatic anatomy, in fact, being markedly distorted. The stomach and duodenal bulb appeared normal, but the second and third portions of the duodenum and the proximal jejunum were surrounded, compressed, and invaded by tumor tissue. The mucosa was not involved except for two ulcerated, hemorrhagic areas in the jejunum. Microscopic examination revealed the primary tumor to be located most probably in the body of the pancreas, with local involvement of duodenum, jejunum and retroperitoneum, and metastases about the paravertebral circulatory system and neck.

*Discussion.*—In this instance, it was clinically very tempting to correlate recent events in the patient's illness with the past history, and to assume complications from a peptic ulcer. Especially was this so since a laparotomy less than two years previously, had revealed no evidence of malignancy, and ulcer-like distress had persisted during this in-



terval. However, objective radiologic examination could not support the clinical impression of localized exudative peritonitis and aided materially in the correct diagnosis of a primarily extramucosal

regime; this gave him some relief but he became so constipated that considerable clonic stimulation became necessary.

For one week prior to admission the patient had noted flecks of blood in his stool. There was no history of

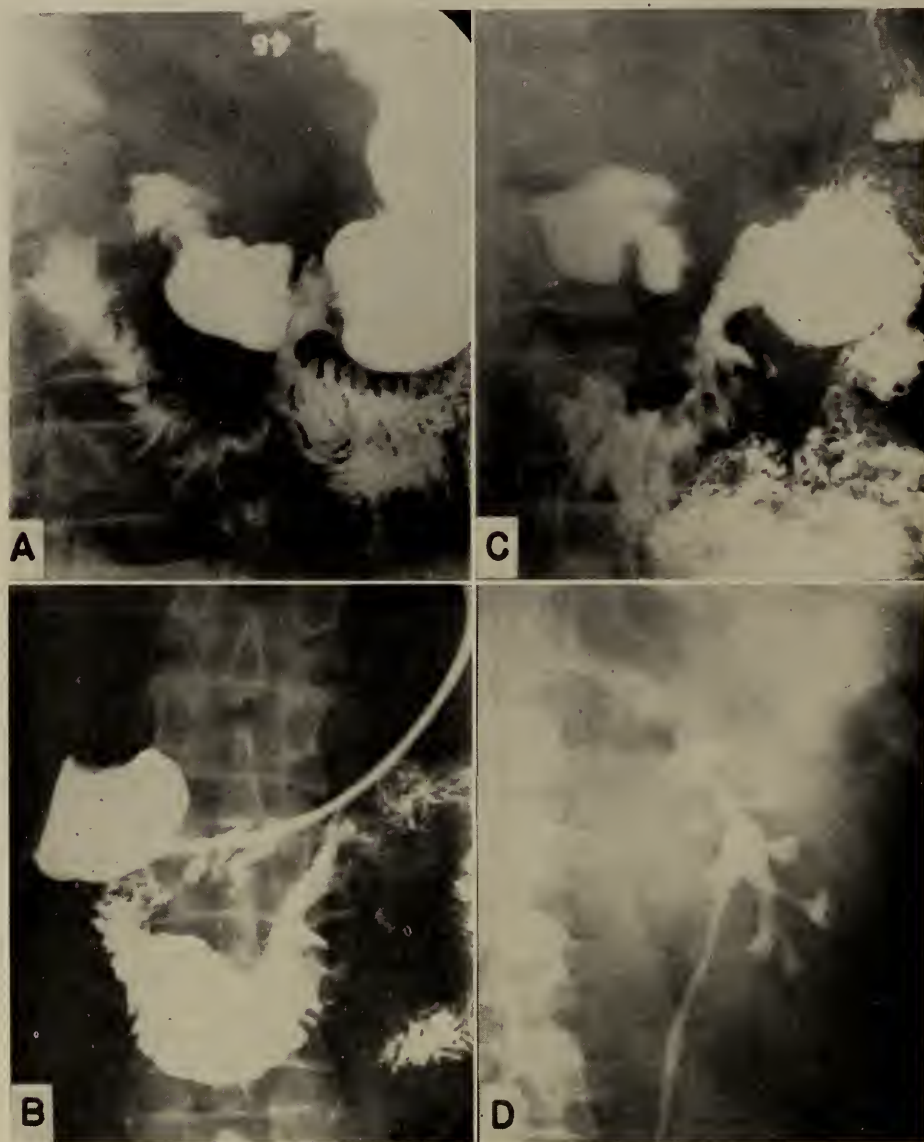


Fig. 8. Intraluminal neoplastic involvement of duodenum and upper jejunum. (A) After ingestion of a barium meal, demonstrating textural irregularities in duodenum and upper jejunum. (B) Injection of barium suspension directly into the duodenum, again demonstrating the textural irregularities, especially at the duodeno-jejunal junction. (C) Examination six weeks later, showing aggravation of involvement. (D) Pyeloureterogram, showing rotation of left kidney from extrarenal neoplastic mass.

intramural neoplastic disease involving the upper small bowel.

*Case 7.*—(Courtesy of Dr. R. J. Elvidge). H. Q., a white man, aged forty-seven, was admitted to Grace Hospital on January 1, 1945, with a history of low back pain for one year and epigastric distress for four months. He had sought medical advice about three months prior to admission, and it was felt, at that time, that he had a peptic ulcer. Accordingly, he was placed on a sippy

hematuria, jaundice, nausea or vomiting. He had lost about 20 pounds since the onset of his illness.

Physical examination revealed slight tenderness in the left lower abdominal quadrant as well as a suggestion of a mass about 3 centimeters to the left of the umbilicus. The blood count showed a moderate anemia with a red blood count of 3,780,000, 72 per cent hemoglobin, and a white blood count of 10,000 with 76 per cent neutrophils and 24 per cent lymphocytes.

On January 2, 1945, a gastrointestinal study showed

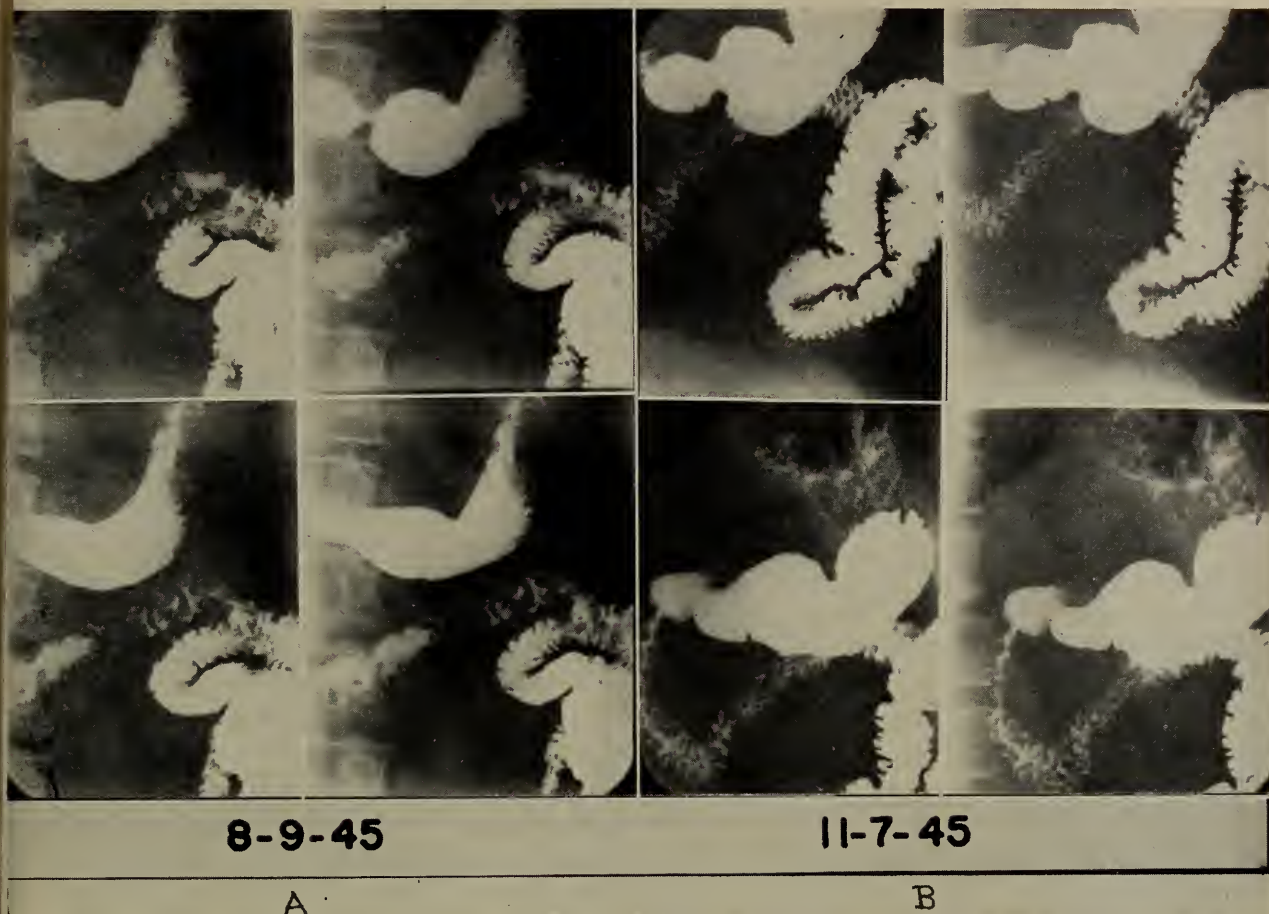


Fig. 9. Localized duodenal and jejunal enteritis due to infestation with *Giardia lamblia*. (A) Serial roentgenograms, demonstrating disruption in the mucosal pattern in the duodenum and, particularly, upper jejunum. (B) Three months later, after treatment with protozoacides, an entirely normal appearance is observed.

textural irregularity in the duodeno-jejunal junction and a disrupted appearance in the ileum (Fig. 8, A). These observations were confirmed by special small bowel studies (injection of barium suspension through a tube into the duodenum) and were interpreted as being due to a regional enteritis (Fig. 8, B). Bilateral instrumental pyelo-ureterography on January 8, 1945, performed because of the low back pain, showed moderate rotation of the left kidney with deviation of the upper ureteral segment (Fig. 8, C).

On January 11, 1945, the patient was discharged from the hospital. His epigastric distress became more severe, and he continued to lose weight. On February 19, 1945, he was readmitted to the hospital and the following day the small bowel was re-examined. This revealed aggravation of the condition previously noted in the region of the duodeno-jejunal junction, so that the proximal segment of the lumen of the jejunum was relatively narrow, rigid, and presented evidence of considerable ulceration and proliferative encroachment (Fig. 8, D). On reviewing this, as well as all previous material, it seemed possible that the rotation of the left kidney and deviation of the upper ureteral segment could be the result of displacement by the same pathological process involving the bowel. In view of the fairly rapid progression of the disease during only six weeks, it seemed that neoplasm

offered a better explanation of all changes mentioned than did the assumption of an inflammatory process. A lymphosarcoma with considerable retroperitoneal involvement could best explain the radiologic features.

Deep roentgen therapy was then advised and seventeen such treatments were administered between February 22, 1945, and March 21, 1945. Only slight subjective improvement was noted.

The patient was then discharged to his home, as remedial operation was considered inopportune. His pain and loss of weight continued. About two months later he requested admission to another hospital with a view toward surgical exploration. However, operation was not done because repeated gastrointestinal and pyelographic studies were considered entirely normal. The patient was then placed under neuropsychiatric observation and management. When our own objective radiologic observations were brought to the attention of the psychiatrists, urologists, internists, and surgeons then interested in the patient, his case was reviewed and a palpable supraclavicular (Virchow) node was discovered and removed for biopsy. This revealed a metastatic neoplastic involvement of highly undifferentiated character. Shortly, the patient was discharged from that hospital and expired, at home, on August 10, 1945. No autopsy was obtained.



*Case 8.*—(Courtesy of Dr. R. R. Sterling). E. G., a middle-aged man, was in the habit of spending most of the winter months in Florida. In the spring of 1944, when he returned to Detroit, he went to his physician because of abdominal distress and bloating, intermittent bouts of diarrhea, and a bad taste in his mouth. He had previously been suspected of carrying a chronic brucellosis, but protracted careful studies had disproved this assumption.

A physical examination as well as laboratory studies revealed no pathological condition. His symptoms continued. Early in 1945, a small intra-abdominal mass, measuring  $\frac{1}{2}$  by 1 inch, was palpated just above the umbilicus. His diarrhea had continued, so exhaustive stool studies, as well as examination of duodenal and jejunal aspiration contents, revealed the presence of *Giardia lamblia* in great abundance. Concomitant radiologic gastrointestinal studies revealed considerable irritation in the entire duodenal circle and particularly in the most proximal jejunal loop with markedly disrupted delineation of the mucosal pattern. This was noticeable immediately following ingestion of the contrast media and also, most strikingly, at the one-hour observation (Fig. 9, A). These findings were interpreted as being due to a localized enteritis involving the duodenum and, with particular severity, the first jejunal loop. The etiology was undetermined but, without any knowledge of the laboratory studies, the possibility of an infestation with *Giardia* was suggested, and a chronic pancreatitis was considered in the differential diagnosis. A perfect correlation of clinical and roentgenological studies thus was obtained.

The patient was then placed on a well-regulated basic diet plus medication consisting of protozoacides. After a three-month period of intensive treatment subjective symptoms entirely subsided and the abdominal mass was no longer palpable. Repeated stool studies undertaken since have been negative for *Giardia lamblia*. Radiologic re-examination of the small bowel on November 7, 1945, revealed no evidence of pathologic conditions (Fig. 9, B). Repeated examinations, at various subsequent periods, showed restoration and maintenance of normal structure of the entire alimentary canal.

*Discussion.*—Cases 7 and 8 emphasize the comment on Cases 5 and 6. The radiologist's interest should be directed just as carefully to the small intestine in its entire length as it is regularly directed to the stomach, duodenum, and colon. The evaluation of disturbances demonstrated objectively, while usually based on the same features as encountered in the stomach or colon, may be somewhat more difficult, and repeated observations with good correlation to the clinical data may be necessary before a final opinion can be expressed. In two instances (Cases 6 and 7), the objective analysis of radiological features and the progressive aggravation of disease led to the correct diagnosis

of neoplasm, while in Case 8 the inflammatory and irritative changes were observed to subside with elimination of the pathogenic parasitic agent. In Case 7, considerable expense for hospitalization, re-examinations, and misdirected neuropsychiatric and neurologic approaches could have been avoided if radiological attention had consistently been paid to the intestinal structures located between the duodenum and colon.

Cases 6, 7, and 8, illustrate the radiological features of extraluminal neoplasm, intra-luminal neoplasm, and reversible mucosal inflammation involving the upper parts of the small intestine.

### Summary

Eight cases of unusual gastrointestinal diseases are presented:

1. Prolapse of redundant gastric mucosa in a patient considered emotionally unstable.
2. Diaphragmatic hernia through the foramen of Morgagni, observed following intussusception of a colonic lipoma.
3. Internal abdominal hernia, diagnosed preoperatively in a patient also presenting diaphragmatic eventration.
4. Chronic gastric volvulus of organo-axial type, with pyloric obstruction.
5. Ulcerative terminal ileitis without correlating clinical manifestations, though associated with cholelithiasis.
6. Extramucosal, intramural and perimural, upper abdominal neoplasm with pronounced manifestations in the duodenum and upper jejunum.
7. Intramural mucosal neoplasm of the duodenum and upper jejunum.
8. Localized duodenal and upper jejunal enteritis produced by infestation with *Giardia lamblia*.

The radiologic features of neoplastic and inflammatory disease of the alimentary canal, particularly the small intestine, are illustrated. The necessity of objective roentgenological study of anatomic structure and function of the entire alimentary canal, as well as independent and unprejudiced correlation to the clinical data, is stressed. To achieve the latter, it is shown that close cooperation and discussion between the radiologist and the clinician is essential.

\* \* \* \*

The author wishes to thank the referring physicians for permission to present the above cases, and he also wishes to acknowledge gratefully the help of Dr. H. A. Jarre,

(Continued on Page 388)

## One Hundred Years of Medical Service

This number of *THE JOURNAL* commemorates the One Hundredth Anniversary of the Wayne County Medical Society—a century of medical progress which saw a rapid evolution take place in the science and art of medicine, progress directly based upon the interest of the medical profession in the improvement of human welfare.

This period saw the institution of laws demanding certification and setting educational standards for those who would practice the healing arts. It saw the development of systematic instruction in medical subjects, and the elimination of the proprietary medical school (in Michigan only two of sixteen have survived), the institution of a State Board of Health, the development of the modern hospital and hospital techniques, and the marked improvement in medical knowledge and treatment.

The Wayne County Medical Society can be proud of its many pioneers who had much to do with this progress. Dr. Herman Kiefer came to Detroit in 1849, and it was through his efforts that there was established the basis for control of contagious and communicable diseases and the realization that government had a very definite place in a preventive program. Dr. Theodore A. McGraw, a founder of the Wayne University Medical School, was a light to the surgical world. He was particularly energetic in stimulating the principles of modern surgical training and practices. Dr. J. Henry Carstens was responsible for the realization that woman was worthy of special medical interest. There were and are others too numerous to mention who have played and are playing their part.

For some time the Wayne County Medical Society has promoted its yearly lecture foundation commemorating the pioneering medical research work of Dr. William Beaumont. The Society is also outstanding in its accomplishments in the socio-economic aspects of medicine.

Yes, the Wayne County Medical Society is to be congratulated on its One Hundredth Anniversary, and we are grateful for its past activities.

*E. P. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



*Page*



# Editorial

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## WAYNE CENTENNIAL

THE COUNCIL of the Michigan State Medical Society takes pleasure in extending its felicitations to Wayne County Medical Society on the celebration of the one hundredth year of active and progressive medical organization. This is an event and occasion to be cherished. The Publication Committee has offered the March issue of THE JOURNAL to commemorate the attainment. With the active assistance of Editor William Bromme, a nearly complete Wayne County number is prepared. There are many worth-while original articles, with an especially advanced group from some of the younger men in the profession. We believe there is much of decided worth here presented, and congratulate the editorial staff from Wayne County.

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## GREETINGS

ON AUGUST 10, 1819 "The Territorial Medical Society" was founded. Through proper channels this became the Michigan State Medical Society. In 1849 a lusty offspring was born.

The following medical practitioners in the County of Wayne, State of Michigan, signed the Constitution of the Wayne County Medical Society April 14, 1849: R. S. Rice, Z. Pitcher, Chas. S. Tripler, H. P. Cobb, J. B. Scovel, C. N. Ege, Adrian R. Terry, P. Klien, A. L. Leland, L. H. Cobb, Richard Inglis.

These eleven names mean little to most of us, but they started something. The growth of all vigorous children is fraught with travail and conflict. Between 1849 and 1866 the Wayne County Medical Society fought and divided three times and then, in the process of maturity, united.

*EDITOR'S NOTE: Because of the plan to popularize the term Blue Shield in Michigan; because of the urgency of disseminating to our members a co-ordinated and continuing discussion of National Health Insurance, which is Socialized Medicine; and because we must continue uninterrupted our fight for good medicine and good services to our people, we have continued our discussion of these subjects in the regular editorial pages of THE JOURNAL, which for this issue have been transferred to the pages usually devoted to information on Socialized Medicine. Please see page 268.*

Today, 100 years later, we number over 2800 members, including honorary, honor and associate members. This I would call a nice beginning.

The Council of the Michigan State Medical Society graciously gave us this number of the JOURNAL. Dr. Bromme and his Editorial Board have made it a good edition. The editorial comment was produced without consultation or editorial direction and thus represents the vigorous, individual contributions of our writers. Many of the papers have been written by interns and residents of the Detroit area hospitals.

It is unnecessary to remind any one that this year, our 100th year, is a crucial one for the profession. The Wayne County Medical Society stands solidly behind the Michigan State Medical Society and the American Medical Association in their fight to provide the best and most comprehensive medical service for the people of the United States.

DOUGLAS DONALD, M.D.

## WHAT OF THE SECOND HUNDRED?

THE FOUNDER members of the Wayne County Medical Society were unaware of certain isolated studies which were destined to alter irrevocably the practice of medicine. Louis Pasteur was exercising a chemist's interest in crystallography, noting the similarity between the growth of crystals and the healing of wounds. Theodor Schwann had established the organic nature of yeast, and Cagniard de Latour had found living cells in the ferment of beer which reproduced by budding and attacked the sugars in the process of their growth. Maternal mortality averaged 12 per cent: Semmelweiss in Vienna reduced this rate to 3 per cent in one fortnight by introducing simple rules of cleanliness, and Oliver Wendell Holmes had printed an essay which pointed out that puerperal fever was conveyed through the medium of the attending physician, but the April 1843 issue of the *New England Quarterly Journal of Medicine and Surgery* had such a limited circulation (it ceased publication within the year) that our Wayne County forebears must not have been aware of it.

These were the days when William Morton was administering ether as an anesthetic agent at the Massachusetts General Hospital and James Simpson in Edinburgh was inhaling chloroform in the view that it was superior to ether. In 1849 he published a paper entitled "Anesthesia or the Employment of Chloroform and Ether in Surgery and Midwifery, etc." The membership of the Wayne County Medical Society did not know about this paper, nor did they know that germs cause disease, for germs had not been discovered. They did not know about antiseptics.

As a matter of fact, there were many things about which they knew nothing. They did not know about the atom and its power as a weapon of mass destruction. They did not know that one could span this entire continent (then being opened by the Overland trails) in a fraction of a day. They did not know that their descendants could sit, flagon in hand, and observe an operation on a television screen. They did not know that the human body could be so divided into minute areas that specialized fellows in medicine had to be created to attend the vagaries thereof. Nor did they know that a "selfless" central government in its paternalism—no more than simple paternalism—proposed to gather unto itself the healing art and dispense this essential of national life as it does postage stamps.

Much more they did not know, too. But they were up early in the morning, to bed late at night against the flicker of a tallow candle, struggling against the mud of Detroit's streets which packed the hoofs of their horses and fouled the spokes of their carriages, attending the beginning and the end of life, giving counsel as physicians, as friends and as citizens. This is the great heritage, and it will still be with us one hundred years from now.

WILLIAM BROMME, M.D.

## I SWEAR BY APOLLO

COMMEMORATION OF A century of medical service by the physicians of the Wayne County Medical Society again spotlights the oneness of purpose of our profession. Our own ideals differ in no way from those of our confreres of a hundred years ago, even though the knowledge and working tools of the craft and the environment we work in have changed.

A hundred years ago our social pattern was such that we were closer to our families for a longer period of time. The family was more intimate, neighborhoods more stable. With urban restlessness neighborhoods are less stable and we have less opportunity to know each other. We appear to be less human—we engender less respect. We are less a part of the people. We perform a more specialized function for the community and are less known as total human beings and are called on less often to counsel in non-medical problems and we appear to be disinterested in civic things and participate less. We seem to have become poorer citizens.

We share fewer periods of emotional stress with our patients. Specific therapeutic agents—greater diagnostic accuracy, more ready hospitalization have reduced those incidents. Hence, we appear more perfunctory, less sympathetic, less attentive to the sufferings of humanity.

Organized charity has replaced individual charity. Paid workers have impersonalized the kindnesses our confreres were privileged to do for those in distress, with spiritual loss to the patient and to us. And we have come to be thought of as less kind—as more mercenary.

Through specialization pain and suffering have been assuaged, illnesses have been eliminated, periods of illness shortened and the life span of our patient lengthened. But it is said that specialization has taken away our independence, has tended to narrow our cultural vista, has blunted us as observers of humans and dulled our philosophy. We have made great strides in solving disease—we have retrogressed in the humanities.

New politico social concepts have used the profession as the instrument of electioneering promises. Because we resist a system predestined to lower the quality of service to our patient, we are pictured as less altruistic—more selfish—more greedy.

Evaluated calmly in the light of the changes that have occurred, the profession has stood fast and has lived by the ancient oath: "To follow that method of treatment which according to my ability and judgment I consider for the benefit of my patients and abstain from whatever is deleterious and mischievous."

FRANK A. WEISER, M.D.



## FREEDOM OF THE SPIRIT

THE WAYNE COUNTY Medical Society is celebrating the first 100 years of existence. These have been years crowded with important events. The tremendous advances made by the Science of Medicine have been reflected in every County society in America. The brilliance of this program has brought out a spark of local talent.

Fifty years ago Roentgen gave his glorified contribution to the world. Michigan was not too far behind in pioneering and applying his gift. What was done and by whom is of local historical interest. That things *were* done is significant.

An outstanding event of 1849 was the Gold Rush to California. This led to the opening of the far west, a new frontier. It provided a stimulus to expand and supplied the means for expansion. The winning of the west benefited a vast number of people. It provided a stupendous influx of immigrants from all of Europe. The oppressed—political and religious—poured into this happy land and helped to develop it, shared its hardships and blessings and made it great. Their children and grandchildren, with no first knowledge of a dominant state are unfamiliar with the bureaucratic approach.

In the past, as today, the selection of treatment was in the hands of the physician. Redress of grievance was available by law under so-called malpractice suits. It could happen, *it has happened*, that under Federal control the selection of treatment will be vested in a bureaucrat. An evil outgrowth of this would be the failure of the Pasteurs, Roentgens and Bantings of tomorrow to obtain an impartial audience. On the premise that anything from Hitlerite Germany is obviously false and worthless, the report of a Domagk would be discarded instead of being seen by an eye trained in science and able to conceive that there might be something to it. Articles would be written for the approval of a higher-up, not in the desire to reach an informed, unbiased audience. The laws of biology have been twisted into conforming to dialectical materialism in Russia today. Only outside of Russia can one say, "The hell they do!!"

America, American Medicine and all it has brought to America have grown great because of its free spirit, and this spirit must not be lost lest all we stand for be lost.

RALPH A. JOHNSON, M.D.

## ON THE RUN

*Emotionally disturbed patients react badly to displays of anger or hostility.*

. . .

*Vertigo in intracranial disease is usually a swimming, giddy or unsteady feeling present almost constantly and aggravated by motion; in Ménière's disease it is violent, paroxysmal and disabling.*

. . .

*Intercostal block for relief of chest pain has with few exceptions replaced the use of opiates and tight adhesive strapping.*

. . .

*Blood transfusions for hemophilia must be repeated at least every 72 hours since the coagulation time of the blood returns to its previous level in about this time.*

. . .

*DDT contaminated foods fed to cattle are stored in their body fat and also excreted in the milk.*

. . .

*In order of importance, the laboratory procedures most helpful in recognizing brain tumor are lumbar puncture (92.7 per cent), electroencephalography (90 per cent) and ventriculography (81.8 per cent).*

. . .

*Primary bronchitis and secondary atelectasis precede the usual case of bronchiectasis.*

. . .

*Hoarseness and fixed vocal cord may be due to syphilis, aortic aneurysm, mitral stenosis or thyroid malignancy.*

. . .

*Cyanosis of the legs alone suggests hemochromatosis.*

. . .

*Constipation is often one of the first symptoms of obstruction carcinoma near the pylorus.*

. . .

*Lymphoma, dermoid cysts and teratomas are the most common anterior mediastinal tumors while neoplasms of neurogenic origin occupy chiefly the posterior mediastinal space.*

Selected by WM. S. REVENO, M.D.

## RANT AND RAVE

We are hoping to have many of our "brave" alumni return for homecoming at this Centennial Celebration. Dr. Al Whittaker, President of the Detroit Historical Society, has managed to locate several of the original Indian medicine men of this territory, charter members of the National Honorary Society, Herb Nu Herb, and they have all agreed to come back with their squaws, papooses and wampum. The Hotel Statler is co-operating with the Centennial Committee by making "reservations" for the Indians. A special post-graduate course has been arranged for the papooses in the form of a "wet" clinic.

Big Chief "Rain-in-the-Puss" will give the main scientific paper at the evening pow-wow around the bonfire. His paper is entitled "The Use and Abuse of Use and Abuse." He will report his experiences with fourteen cases of—fire water.—UGH!

R &amp; R

Dr. William Brady, alleged medical columnist whose chief enjoyment in his senile sphere of vegetative existence is to ridicule the attitudes of the modern physician, stated in a recent article: "Instead of taking the chance of typographical errors in specifying the dose of nitro glycerine, I refer readers to page 24 of the booklet C.V.D. where I instruct those subject to angina pectoris how to use nitro glycerine."

At the end of the article in bold type there is this paradoxical statement: "Signed letters of not more than one page or 100 words will be answered by Dr. Brady. **HE WILL NOT DIAGNOSE DISEASE OR SUGGEST TREATMENT.**"

Dr. Brady calls himself an old "horse and buggy doc." We know he's old and also a little "buggy"—and we also know what part the horse plays in his daily health column.

R &amp; R

The City Council of San Francisco was having a regular meeting at the City Hall when several small earthquake shocks were felt, and the Council chamber emptied rather suddenly for security reasons. Later the Clerk of the Court, one Edward Spalding, who was a stickler for Robert's Rules of Order, formally closed the meeting by adding this final line to his minutes, "On motion of the City Hall, the meeting was adjourned."

MARCH, 1949

Jack DeTar, that eloquent atomic fireball of the rostrum of the State Society (Speaker of the House, to you), made a complete critical survey of Ewing's health report, and we understand that someone sent Oscar Ewing a copy of it. Dr. DeTar must have spent many hours in this monumental effort, and we suggest that the doctors in the State of Michigan present him with an "Oscar"—without the Ewing.

R &amp; R

We presume that the Communists in Rhode Island could properly be called Rhode Island Reds—but that would be a fowl joke—almost as bad as the one about the fellow that went into the chicken business and made a few poultry dollars.

P.S. Please don't write and tell us that the two misspelled words are "foul and paltry."

R &amp; R

Horace Greeley said, "Go west, young man"—so it is more than an interesting coincidence that while everybody else was heading west in 1849 to look for gold, a small group of doctors stayed home and founded the Wayne County Medical Society. "Thar's gold in them thar pills."

R &amp; R

It won't be long before we can call long distance from our own phones just by dialing the numbers—without the operator's interference—and we do mean interference. F'rinstance, if you want to call someone in a town in Russia, say, f'rinstance, a place called Dniepropetronsky, all you would have to do is to dial JS—(which stands for Joe Stalinovitch or something that rhymes with that)—then wait for the loud gong to sound which indicates that the iron curtain has risen—then you go ahead and dial USSR-DNIEPROPETRONSKY. Then put your dialing finger in a bowl of hot water and let it soak for awhile.

Be sure to have the operator tell you when your three minutes are up.

R &amp; R

A high recommendation:

"Before using your salve, I had a wart on my neck that weighed seven pounds. After using two barrels of your quick cure, four-way, atomic balm salve, my neck has entirely disappeared—and the wart remains. I do not have any more pain in my neck. What shall I do with the wart?"

Yours truly.

R &amp; R

(Continued on Page 371)



# Program of The American Medical Association

## *The Advancement of Medicine and Public Health*

### A Federal Department of Health

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine, and the co-ordination and integration of all Federal health activities under this Department, except for the military activities of the medical services of the armed forces.

### Medical Research

2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.

### Voluntary Insurance for the Care of the Indigent

3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas. Aid through the states to the indigent and medically indigent by the utilization of voluntary hospital and medical care plans with local administration and local determination of needs.

### Medical Care Authority with Consumer Representation

4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.

### New Facilities

5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas in which the need can be shown and with local administration and control as provided by the National Hospital Survey and Construction Act or by suitable private agencies.

### Public Health

6. Establishment of local public health units and services and incorporation in health centers and local public health units of such services as communicable disease control, vital statistics, environmental sanitation, control of venereal diseases, maternal and child hygiene and public health laboratory services. Remuneration of health officials commensurate with their responsibility.

### Mental Hygiene

7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.

### Health Education

8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.

### Chronic Diseases and the Aged

9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.

### Veterans' Medical Care

10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care, including care of the veteran in his own community by a physician of his own choice.

### Industrial Medicine

11. Greater emphasis on the program of industrial medicine, with increased safeguards against industrial hazards and prevention of accidents occurring on the highway, home and on the farm.

### Medical Education and Personnel

12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

# Know Your MSMS Councilors

## TENTH DISTRICT

Fred H. Drummond, M.D.

*Kawkawlin*



Dr. Drummond took his pre-medical work at Albion College and received his M.D. degree from Northwestern University in 1920. He served his internship at the Kansas City General Hospital, Kansas City, Missouri.

Civic activities of Dr. Drummond include leadership in the

American Legion and membership in Sigma Chi Fraternity. He is also a past-president of the Bay County Medical Society, and chairman of the Medical Filter Board for Bay County Supervisors.

Dr. Drummond has been chief-of-staff and also secretary of staff at Mercy Hospital, Bay City and presently is working with the obstetrical section of the Mercy and General Hospitals, Bay City.

## SEVENTH DISTRICT

Thomas Edward DeGurse, M.D.

*Marine City*



Dr. DeGurse who was honored in 1947 as Michigan's Foremost Family Physician completed his pre-medical and medical training at the Detroit College of Medicine, now Wayne University, in 1895.

During the Spanish-American War he served as Acting Hospital Steward in Puerto

Rico, and in 1906 was appointed by the United States Government as a medical examiner in the U. S. Marine Corps. Dr. DeGurse was on the St. Clair County Draft Board during World War I, and Chairman of the Appeal Board of St. Clair, Macomb, and Sanilac Counties in World War II.

Aside from his medical attainments, his civic activities alone would constitute an enviable career. In addition to serving nine terms as mayor of Marine City, and its Health Officer for thirty-five years, Dr. DeGurse is Acting Assistant Surgeon of the U. S. Public Health Service. He is

also local physician for the Michigan Bell Telephone Company, the Detroit Edison Company, Pittsburgh Steamship Company, Standard Products Company, Motor Valve & Manufacturing Company, and the Detroit Gasket Manufacturing Company.

Dr. DeGurse is Chairman of First Aid Teaching in the Red Cross, and a member of the Industrial Surgeons Association.

At the present time he is affiliated with hospitals in Port Huron, St. Clair, St. Joseph, Mt. Clemens, and Mt. Carmel Hospital in Detroit.

## EIGHTH DISTRICT

Lloyd Cecil Harvie, M.D.

*Saginaw*



Dr. Harvie was graduated from Michigan State Normal College and earned his M.D. degree from the Wayne University College of Medicine in 1918. Following graduation from medical school, he interned at St. Mary's Hospital in Detroit with residency at the A. W. Blain Clinic. Dr. Har-

vie's postgraduate training has included eye and ear work in New York, Wayne University, the University of Michigan, and George Washington University.

A private in World War I, he served as an officer in the Medical Corps in World War II. Dr. Harvie is a past-president of the Saginaw County Medical Society, a past member of the State Tuberculosis Sanatorium Commission, former Assistant Clinical Professor of Medicine at the Wayne University College of Medicine, Fellow of the American College of Surgeons, member of the American Association of Railway Surgeons, and American Association of Industrial Physicians and Surgeons.

Extremely active in civic organizations, Dr. Harvie has been a Boy Scout executive and member of the Saginaw Board of Commerce, Elf Khurafeh Shrine and YMCA. In addition he is vice-president of the Saginaw Valley Torch Club, president of the Wayne University Alumni Association of Saginaw Valley, and past director of the Saginaw Chapter of the American Red Cross.

At present, Dr. Harvie is senior staff surgeon at



Saginaw General Hospital, and associate surgeon on the staffs of St. Luke's and St. Mary's Hospitals, Saginaw, and A. W. Blain Hospital in Detroit.

### FIFTH DISTRICT

**J. Duane Miller, M.D.**

*Grand Rapids*



Dr. Miller received his pre-medical and medical degrees at the University of Michigan in 1924, and interned at Blodgett Memorial Hospital in Grand Rapids. He took postgraduate work in pathology at the University of Michigan and the University of Vienna.

An enlisted man in the Army during World War I, Dr. Miller served in World War II as a Commander in the Medical Corps of the Navy. Among professional memberships are those of Fellow of the American College of Surgeons, Diplomate of the American Board of Surgery, and president of the Michigan Association of Industrial Physicians and Surgeons.

At the present time Dr. Miller is chief-of-surgery at Blodgett Hospital in Grand Rapids.

### NINTH DISTRICT

**Ellery Armour Oakes, M.D.**

*Manistee*



Dr. Oakes received his pre-medical training at Albion College and was graduated from Wayne University College of Medicine in 1925. After interning at Receiving Hospital in Detroit, he took postgraduate courses at the New York Postgraduate Hospital and Medical School in 1932, 1934,

and 1936.

Dr. Oakes served for 26 months with the Ninth Infantry Division during World War I. A member and past-president of the Manistee Rotary Club, he has also served on the Red Cross Board and Chamber of Commerce. Dr. Oakes is a past-president of the Manistee County Medical Society.

He is affiliated with Mercy Hospital, Manistee, as chief of surgery.

### SIXTH DISTRICT

**Rolland Carl Pochert, M.D.**

*Owosso*



Dr. Pochert took his pre-medical work at Junior College, Detroit, and his M.D. degree at the Detroit College of Medicine. After graduation in 1921 he served his internship and residency at Receiving Hospital in Detroit. Following his residency he took additional postgraduate work at the

University of Pennsylvania, at the University of Michigan, and also in Indianapolis.

His professional memberships include the Academy of Ophthalmology and Otolaryngology, the Valley Academy, and his Fellowship in the American College of Surgeons.

### FIRST DISTRICT

**Clarence Earl Umphrey, M.D.**

*Detroit*



Dr. Umphrey received his pre-medical training at Michigan State Normal College and Wayne University receiving his M.D. degree from the Wayne University College of Medicine in 1925. After interning at Receiving Hospital in Detroit, he served his residency at Delray General Hospital. He took

an intensive year of postgraduate work at Wayne University and Receiving Hospital in basic sciences and surgical technique in 1945-46.

A non-commissioned officer in World War I, Dr. Umphrey has participated actively in veterans and civic affairs. He is a member of the American Legion, a past-president of the Glen Oaks Golf Club, and a member of the Pine Lake Country Club.

His professional affiliations include memberships in the West Side Medical Society, Noon Day Study Club and Wayne University Alumni Association. Dr. Umphrey is chairman of the Michigan branch of the National Physicians' Committee and holds a Fellowship in the International College of Surgeons. He is connected with the Florence Crittenton and Grace Hospitals in Detroit.

Among articles and papers he has written are

those on Gonorrheal Arthritis, Medical Societies, Acute Pancreatitis, and his "Sixty-two Surgical Problems With Complete Case Histories and Surgical Technique" published in book form.

## SECOND DISTRICT

Philip Arthur Riley, M.D.

*Jackson*



Dr. Riley received his pre-medical training at the University of Detroit and St. Louis University with his M.D. degree coming from the latter school in 1922. He served his internship at Alexian Brothers Hospital in St. Louis, Missouri, and at Mercy Hospital, Jackson, Michigan. He has spent

three summers in postgraduate study at Harvard University.

Dr. Riley is a veteran of World War I. He is a director of Michigan Medical Service. He is also a Diplomate of the American Board of Urology and a Fellow of the American College of Surgeons.

At the present, Dr. Riley is affiliated with Mercy Hospital, Jackson, as chief-of-staff, and is on the consulting staff of the W. A. Foote Hospital, Jackson.

## ELEVENTH DISTRICT

Charles Anthony Paukstis, M.D.

*Ludington*



Dr. Paukstis received his pre-medical training at Grand Rapids Junior College and was graduated from the University of Michigan Medical School in 1931. He served his internship at Mercy Hospital, Janesville, Wisconsin. He has been active in his postgraduate studies, attending the Cook County Grad-

uate School of Surgery, the University of Michigan Clinical Course for General Practice and also its Anatomy Review Course.

Extremely active in civic affairs, the Councilor of the Eleventh District is President of the Ludington Chamber of Commerce, as well as a Past-President of the Rotary Club. He is a member of the staff of Paulina Tearns Hospital in Ludington.

*(To be continued in April issue.)*

## RANT AND RAVE

*(Continued from Page 367)*

We hope you did not forget to deduct all of those items that you were supposed to deduct from your Income Tax. You may deduct the cost of going to medical conventions—even if they were at faraway places—unless you took a "slow boat to China" to attend the Oriental Amalgamated International College of Physicians and Surgeons of Shanghai, Tsingsing and Peep In. Poker losses are not deductible unless you are playing with the money you were going to give to charity—in which case you turn to page 4, section 7, article 3, line 5 and enter the amount you lost, and if this amount is greater than that of line 22, page 3, you are using the wrong form, so tear this up and start over again.

R & R

Well, we see by the papers that the obstetricians have something new in the way of caudal analgesia—and they have appropriately named it "PPP"—for Planned Painless Parturition. This "new" method of delivery is so painless and casual that the mother rarely knows that she has had a baby until she reads about it in the Society page.

One woman writes: "Before I had "PPP" I just dreaded pregnancy—now I can hardly wait."

R & R

We are surprised that the members of our State Legislative Committee have not seen fit to provide themselves with the proper accoutrements of their offices—and wear bow ties. The best practical reason we have heard for wearing one of these butterflies under the chin is to hide a worn out, beat up, frayed shirt collar.

## DO YOU KNOW?

A fur farm, to be established in Tierra del Fuego, the island group beyond the southern tip of South America, will raise six kinds of foxes but will specialize in nutrias and mink.

Citrus molasses, also known as final syrup, is a by-product in processing citrus fruit products.

Acids from citrus fruits are used to give zip to soy-bean oil salad dressing.

Much of nature's chemistry in geological processes was carried out at high pressures and temperatures, not yet explored by man; when man does enter this high-pressure high-temperature field, he may have to rewrite much of the chemistry of today.—*Science News Letter*, March 5, 1949.



# Postgraduate Continuation Courses

## Wayne University College of Medicine

March 21 to June 18, 1949

These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the GI Bill, should make arrangements for tuition and books, as provided by the GI Bill, by presenting these Certificates of Eligibility to Mr. Arthur Johnson, Veterans Administrator at Wayne University, 5001 Second, Detroit.

Veterans who do not possess a Certificate of Eligibility, are requested to call Mr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers are necessary to bring to the office. *This must be completed before registering.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, *before March 18.*

### ANATOMY

Surgical Anatomy (Second half)	College of Medicine	Tuesday, 3-5	\$35.00
Regional Anatomy Extremities and Back (Be- gins March 16)	College of Medicine	Wednesday, 1-4	\$50.00
Trunk (Begins March 17)		Thursday, 1-5	\$50.00
Head and Neck (Begins March 18)		Friday, 1-5	\$50.00

### BACTERIOLOGY

Parasitology	College of Medicine	Friday, 1-5	\$35.00
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### PHYSIOLOGY AND PHARMACOLOGY

Blood	College of Medicine	Tuesday, 4-5 Friday, 3-5	\$35.00
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### PHYSIOLOGICAL CHEMISTRY

Seminar	College of Medicine	Wednesday, 4-5	\$15.00
Intermediary Metabolism	College of Medicine	Friday, 4-5	\$15.00
Survey of Medical Chemistry	College of Medicine	Thursday, 4-5	\$15.00
Nutrition and Metabolism	College of Medicine	Mon., Wed., Fri., 11-12	\$35.00

### PATHOLOGY

Bone & Joint Diseases	College of Medicine	Monday, 1-5	\$50.00
Gynecologic Pathology (Limited to 35)	College of Medicine	Wednesday, 1-5	\$50.00

### DERMATOLOGY

Seminar	Receiving Hospital	Wednesday, 10-11:30	\$15.00
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### INTERNAL MEDICINE

Diagnostic Conference	Receiving Hospital	Saturday, 10-12	\$15.00
(Limit 10)	Wayne County General	Wednesday, 4-5	\$15.00
Gastroenterology	Receiving Hospital	Saturday, 8-9	\$15.00
(Limit 10)			
Medical X-Ray Conference	Receiving Hospital	Tuesday, 11-12	\$15.00
(Limit 10)	Wayne County General	Friday, 1-2	\$15.00
Medical Pathologic Conf.	Wayne County General	Thursday, 11-12	\$15.00
Allergy Clinic & Conf.	Receiving Hospital	Tuesday, 8-11	\$25.00
(Limit 8)			

### SURGERY

Seminar (Limit 20)	College of Medicine	Monday, 5-6	\$15.00
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# Annual Session of the Council

January 28-29, 1949

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## HIGHLIGHTS OF THE SESSION

- Auditor's (Ernst & Ernst) report for 1948, and budgets for 1949 approved (see Pages 379-383).
- Annual Reports of Secretary, Treasurer, Editor, and three Standing Committees of The Council accepted.
- Secretary L. Fernald Foster, M.D., Treasurer A. S. Brunk, M.D., and Editor Wilfrid Haughey, M.D., re-elected.
- Veterans Administration Hospital cut-back discussed with Joseph W. Mann, Department Service Officer, Veterans of Foreign Wars.
- Hillsdale Plan of Cancer Detection, as well as a meeting of state and local organizations—to be sponsored by MSMS Cancer Control Committee—to explain Hillsdale Plan, approved.
- Program of Optometry at the University of Michigan approved, provided it does not permit graduates to give drugs for examination or drug therapy or do surgery in eye conditions and is approved by the Departments of Ophthalmology at University of Michigan Medical School and at Wayne University College of Medicine.
- Survey of maternal deaths and a continuing educational program approved and referred to Michigan Foundation for Medical and Health Education, Inc., for financial support.
- Report approved from Committee to Increase Number of Students Graduated from Medical Schools; Special Committee on Education (three meetings) and its sub-committees on Publications, Newspapers, and Cinema; Cancer Control Committee; Michigan Heart Association Organization Committee; Committee on Scientific Radio; Rheumatic Fever Control Committee; Maternal Health Committee; Committee of Six; Mental Hygiene Committee; Preventive Medicine Committee; Committee on Postgraduate Medical Education; and Committee on Uniform Fee Schedule for Governmental Agencies.
- Progress report on Michigan Medical Service presented by R. L. Novy, M.D., Detroit and on Michigan Hospital Service by W. S. McNary, Detroit.
- Monthly reports of President E. F. Sladek, M.D., President-Elect W. E. Barstow, M.D., Secretary L. Fernald Foster, M.D., and General Counsel J. Joseph Herbert accepted.
- Official report of MSMS Delegates to the American Medical Association—on St. Louis Interim Session—accepted.
- Progress report on Michigan Health Council presented by A. S. Brunk, M.D., President.
- Michigan Foundation for Medical and Health Education invited to sponsor 1949 Michigan Rural Health Conference.
- A. S. Brunk, M.D. and L. Fernald Foster, M.D. selected as MSMS representatives to the AMA Co-ordinating Committee for the Protection of the People's Health (Committee of 53).



## SECRETARY'S ANNUAL REPORT—1948

## Deaths During 1948

## Membership

The Michigan State Medical Society membership for 1948 showed a total of 4,960 members, including 74 Emeritus Members, 92 Life Members, 12 Retired Members, 119 Associate Members and Military Members. The total paid membership was 4,663, with net dues of \$48,327.17. The total number of members with unpaid dues for 1948 totaled eighty-six. The 1948 membership was at the highest peak in all the history of the Michigan State Medical Society.

The year 1948 resulted in a net gain in membership of 164 members. The membership tabulation for the years 1947 and 1948 showing net gains, losses, unpaid dues and deaths is as follows:

We regretfully record the deaths of the following seventy-three members during 1948:

*Alpena-Alcona-Presque Isle*—Clarence A. Carpenter, M.D., Onaway; William B. Newton, M.D., Alpena.  
*Bay-Arenac-Iosco*—Jerry M. Jones, M.D., Bay City; William Kerr, M.D., Bay City.  
*Berrien*—Harold C. Frederickson, M.D., Buchanan.  
*Calhoun*—Starr K. Church, M.D., Marshall; Carrie Kellogg, M.D., Battle Creek.  
*Cass*—E. M. Cunningham, M.D., Cassopolis.  
*Chippewa-Mackinac*—James F. Darby, M.D., St. Ignace.  
*Clinton*—T. Y. Ho, M.D., St. Johns.  
*Eaton*—Charles D. Huber, M.D., Charlotte.  
*Genesee*—M. William Clift, M.D., Midland; Mark S. Knapp, M.D., Fenton; William H. Marshall, M.D., Flint.

## Membership Record—1948

County Medical Society	PAID		Spec. Member		Assoc. Military	DEATHS		Net Membership		1948		Unpaid	
	1947	1948	EMER	LIFE		1947	1948	1947	Close 1948	GAIN	LOSS	1947	1948
Allegan .....	23	24	—	—	—	—	—	23	24	1	—	—	1
Alpena, Alcona Presque Isle.....	17	19	—	—	—	—	2	19	19	—	—	2	—
Barry .....	10	12	—	3	—	1	—	13	15	2	—	1	—
Bay, Arenac, Iosco .....	73	63	3	6	1	2	2	76	73	—	3	6	1
Berrien .....	62	69	—	—	—	2	1	60	69	9	—	5	2
Branch .....	23	20	—	—	—	1	—	23	20	—	3	1	—
Calhoun .....	101	98	—	5	1	4	2	105	118	13	—	9	2
Cass .....	10	11	—	—	—	—	1	10	11	1	—	—	—
Chippewa-Mackinac ..	18	23	1	—	—	—	1	19	24	5	—	5	—
Clinton .....	12	10	—	—	—	—	1	12	10	—	2	—	1
Delta-Schoolcraft .....	19	26	1	—	—	—	—	20	27	7	—	3	—
Dickinson-Iron .....	18	18	—	—	—	—	—	18	18	—	—	3	—
Eaton .....	18	15	—	—	—	1	1	17	15	—	2	5	1
Genesee .....	187	187	3	8	1	3	3	194	199	5	—	9	2
Gogebic .....	20	19	—	—	—	—	1	20	19	—	1	2	—
Gd. Traverse-Lee-lanau-Benzie .....	41	48	—	1	—	—	2	47	49	2	—	7	1
Gratiot-Isabella-Clare .....	36	39	2	—	—	—	1	36	41	5	—	1	—
Hillsdale .....	15	19	—	3	—	—	—	20	22	2	—	2	—
Houghton-Baraga-Keeweenaw .....	32	28	3	2	—	—	1	36	33	—	3	2	1
Huron .....	15	13	—	1	—	—	1	16	14	—	2	—	2
Ingham .....	154	154	3	2	3	3	1	166	162	—	4	17	3
Ionia-Montcalm .....	37	33	—	2	—	2	3	36	37	1	—	2	1
Jackson .....	103	101	4	4	—	1	2	111	111	—	—	6	—
Kalamazoo .....	119	114	3	5	2	4	3	125	126	1	—	4	—
Kent .....	258	267	4	9	2	4	3	298	292	—	6	12	7
Lapeer .....	12	13	3	—	—	1	1	15	16	1	—	2	—
Lenawee .....	43	44	—	1	—	—	2	43	45	2	—	5	—
Livingston .....	15	17	—	—	—	—	—	17	18	1	—	1	—
Luce .....	4	6	—	—	—	—	—	7	6	—	1	2	2
Macomb .....	41	45	—	1	—	—	1	44	46	2	—	2	—
Manistee .....	13	13	1	—	—	—	1	15	14	—	1	2	—
Marquette-Alger .....	39	38	—	2	—	1	—	39	41	2	—	2	4
Mason .....	12	13	—	—	—	—	—	12	13	1	—	—	—
Mecosta-Osceola-Lake .....	13	14	1	—	—	—	1	13	15	2	—	1	—
Menominee .....	12	13	1	—	—	—	—	14	15	1	—	3	1
Midland .....	15	19	—	—	—	—	—	16	19	3	—	1	1
Monroe .....	36	32	1	—	—	1	—	36	33	—	3	4	1
Muskegon .....	82	84	1	—	—	1	—	83	87	4	—	—	—
Newaygo .....	7	10	—	—	—	—	—	10	10	—	—	1	—
North Central Counties .....	14	15	—	—	—	2	—	13	15	2	—	1	—
Northern Michigan ..	29	30	1	—	—	—	3	33	31	—	2	3	4
Oakland .....	147	166	1	1	—	4	3	157	168	11	—	15	4
Oceana .....	12	7	2	—	1	—	—	13	10	—	3	—	—
Ontonagon .....	4	4	—	—	—	—	—	4	4	—	—	1	—
Ottawa .....	36	34	1	1	—	2	—	35	36	1	—	—	—
Saginaw .....	102	106	3	5	1	—	—	108	115	7	—	7	1
St. Clair .....	50	55	1	1	—	3	1	55	57	2	—	1	2
St. Joseph .....	23	27	—	—	—	—	—	24	27	3	—	1	—
Sanilac .....	10	14	—	—	—	—	—	11	14	3	—	3	—
Shiawassee .....	23	25	1	—	—	1	—	26	26	—	—	4	—
Tuscola .....	23	21	1	—	—	—	1	25	22	—	3	—	1
Van Buren .....	19	21	4	—	—	—	—	25	25	—	—	2	—
Washtenaw .....	163	187	1	—	74	1	3	180	262	82	—	43	5
Wayne .....	2,073	2,139	23	29	9	17	23	2,183	2,201	18	—	116	35
Wexford-Missaukee .....	20	21	—	—	—	—	1	20	21	1	—	4	—
TOTALS .....	4,513	4,663	74	92	12	62	73	4,796	4,960	203	39	331	86

- Gogebic*—David C. Pierpont, M.D., Ironwood.
- Gd. Traverse-Leelanau-Benzie*—E. L. Covey, M.D., Honor; Fred E. Murphy, M.D., Traverse City.
- Gratiot-Isabella-Clare*—B. C. Hall, M.D., Pompeii.
- Houghton-Baraga-Keeweenaw*—Robert J. McClure, M.D., Calumet.
- Huron*—William B. Holdship, M.D., Ubly.
- Ingham*—Victor C. Myers, M.D., Lansing.
- Ionia-Montcalm*—James A. P. Duncan, M.D., Lansing; Thomas L. Peacock, M.D., Lake Odessa; R. R. Whitten, M.D., Ionia.
- Jackson*—Henry Gray Glover, M.D., Jackson; Arthur J. Roberts, M.D., Jackson.
- Kalamazoo*—Walter Den Bleyker, M.D., Kalamazoo; Ray T. Fuller, M.D., Kalamazoo; David E. Squires, M.D., Scotts.
- Kent*—Charles V. Crane, M.D., Grand Rapids; Willis L. Dixon, M.D., Grand Rapids; William D. Lyman, M.D., Grand Rapids.
- Lapeer*—Herman B. Kiehle, M.D., Lapeer.
- Lenawee*—William E. Jewett, M.D., Adrian; Arthur E. Lamley, M.D., Blissfield.
- Macomb*—Alphonse M. Crawford, M.D., Romeo.
- Manistee*—Harlen MacMullen, M.D., Manistee.
- Mecosta-Osceola-Lake*—Donald McIntyre, M.D., Big Rapids.
- Northern Michigan*—Ralph D. Engle, M.D., Petoskey; Gilbert E. Frank, M.D., Harbor Springs; Fraley McMillan, M.D., Charlevoix.
- Oakland*—Zae R. Aschen Brenner, M.D., Farmington; John T. Bird, M.D., Drayton Plains; T. W. K. Hume, M.D., Pontiac.
- St. Clair*—Neil J. McColl, M.D., Port Huron.
- Tuscola*—Oren G. Johnson, M.D., Mayville.
- Washtenaw*—Albert S. Barr, M.D., Ann Arbor; Theophil Klingman, M.D., Ann Arbor; Marianna E. Smalley, M.D., Ann Arbor.
- Wayne*—Frank B. Allison, M.D., Detroit; Emil Amberg, M.D., Detroit; Nathan J. Bicknell, M.D., Detroit; William R. Chittick, M.D., Spring Valley; Frank E. Dawson, M.D., Detroit; John A. Freese, M.D., Detroit; Parker B. Gamble, M.D., Detroit; Howard B. Garner, M.D., Detroit; Joseph Hanson, M.D., Detroit; Lester F. Kennedy, M.D., Detroit; Marcine D. Klote, M.D., Detroit; George D. Livingston, M.D., Detroit; George M. Livingston, M.D., Albion; Frank P. Mabec, M.D., Detroit; Grant McDonald, M.D., Detroit; Malcolm McPhail, M.D., Great Falls; E. Glenn McPherson, M.D., Detroit; Russell H. Renz, M.D., Detroit; Hawley S. Sanford, M.D., Detroit; Adolph Shoenfield, M.D., Detroit; H. Lee Simpson, M.D., Detroit; Eldwin R. Witwer, M.D., Detroit; Ross L. Zimmerman, M.D., Detroit.
- Wexford-Missaukee*—George W. Brooks, M.D., Tustin.

#### Financial Status

Ernst and Ernst, Certified Public Accountants, have submitted their report on the annual audit of the books of the Michigan State Medical Society. The report has been submitted to the officers of the Society and members of the Finance Committee of The Council, and is subject to the perusal of all members of the State Society.

A brief statement is herewith submitted for information of the members:

The total assets are listed at \$194,259.58. This recognizes a gain of \$13,879.11 over the report of December 31, 1947. It should be noted that this gain appears in

the amounts earmarked for the special funds such as Public Education Program, Rheumatic Fever Control Program, et cetera. The actual income from all sources other than the special assessment was \$69,679.58 while the actual expense of running the organization was \$78,291.94 which shows a loss of \$8,612.36. This fact should be taken into consideration when the dues structures are considered next September.

Mr. Ewing's report, recommending Compulsory health insurance through early federal legislation ushered in an emergency. The executive committee unanimously voted to start an all-out effort of education to our citizens to preserve if possible the voluntary system of services. If necessary the entire funds earmarked for the Public Education Program could be utilized. Under the able leadership of Mr. Hugh Brenneman, six associates have been employed and an extensive plan of contact and education set up. We believe it to be the best plan in operation to date. All of this will be reflected in the financial report another year. We should have no regrets concerning the present expenditures. There should be nothing but gratitude for the foresight and ability to conserve the American Way of Life.

For many years we have been asking the AMA to assume the leadership to which we were entitled even if it entailed an assessment. This has been done. The assessment should be paid quickly and gladly and with that payment should go an offer to help in any way that was humanly possible. We hope that even after the present emergency is over the parent organization will continue every effort to formulate the best plans for complete medical care for every one, every where. We urge this even if a continued assessment is necessary.

As a business organization we have been very slow in recognizing what we owe the public. Our patients are entitled to know what good medical care consists of and how it can be obtained. Lay organizations have recognized the value of educational programs and have spent vast sums of money on them. American business looks on our efforts as shortsighted and miserly.

Because of the above activities requiring added expenditures your Council and Executive Committee will face new responsibilities. The financial reports and monthly balance sheets will continue to receive close scrutiny. Won't you examine them with us and offer us your suggestions? We will urge a reduction in assessments only after the best plans for medical care have been completed and the free American way of life prevails. Compulsory health insurance is the other method of removing assessments and once it has been enacted no effort of ours or educational fund will regain what bureaucratic control has taken from us.

#### 1948 Annual Session

The 1948 Annual Session held in Detroit in September, showed a total registration of 3,399, which was an all-time high in attendance at an Annual Meeting of the Michigan State Medical Society.

The General Assembly type of program with daily discussion conference was continued as in recent years and brought to Michigan twenty-nine essayists.

The limited exhibit space available in Detroit precluded the possibility of a Scientific Exhibit but allowed seventy-five technical exhibitors in eighty-three spaces.

The policy of bringing to the Scientific Assembly out-of-state essayists of national and international reputation was continued and no expense was spared in making the meetings as interesting and instructive as possible, and in spite of the rapidly rising costs of operation a small gross profit before proration of salaries accrued to the society from the Annual Session. To the seventy-five Technical Exhibitors the registrants showed their usual appreciation and gave them very generous attention.

#### 1948 House of Delegates

The House of Delegates, in four sessions, transacted the legislative business of the society with as much



despatch as possible, consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

1. Adopted resolutions concerning:
  - (a) Creation of Committee on Geriatrics (to include work of former Committee on Heart and Degenerative Diseases).
  - (b) Requisites for nurse training.
  - (c) Creation of Medical Library Service.
  - (d) Recognition of forty-six years' attendance at House of Delegates Sessions by A. V. Wenger, M.D., Grand Rapids.
  - (e) Veterans Administration Hospital in Ann Arbor.
  - (f) Formation of National Agency for Voluntary Health Service Plans (amended).
  - (g) Special Assessment (\$25.) for 1949.
  - (h) Creation of 17th and 18th Councilor Districts.
  - (i) To increase number of medical graduates.
  - (j) Resolution of Section on Ophthalmology (substitute resolution approved).
  - (k) Token of esteem to E. R. Witwer, M.D., Detroit, for his services to Medicine.
2. Took action on other resolutions as follows:
  - (a) *Postponed indefinitely* resolution re comprehensive practice act.
  - (b) *Defeated* resolution proposing reduction in term of Councilors.
  - (c) *Defeated* resolution that House of Delegates resolutions be presented thirty days prior to Session.
  - (d) *Referred* the resolution re consultation of doctors of medicine with osteopaths to The Council with instruction to act.
  - (e) *Disapproved* resolution re A.C.S. Hospital standards.
3. (a) Adopted motion to instruct The Council to map out two new Councilor Districts.  
 (b) Adopted motion setting terms of Councilors of 17th District (1953) and 18th District (1949).
4. (a) Elected fourteen members to Emeritus Membership.  
 (b) Elected forty members to Life Membership.  
 (c) Elected sixty-one members to Associate Membership.  
 (d) Elected one member to Retired Membership.
5. Adopted general revision of Constitution and By-Laws.

#### Michigan Postgraduate Clinical Institute

This second annual scientific institute held under the sponsorship of the Michigan State Medical Society in co-operation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University college of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 10, 11, 12, 1948.

This Institute limited to Michigan essayists, was designed to provide a high-type scientific program, encourage Michigan physicians to prepare presentations and to publicize Michigan as a Medical Center.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 1,462, with physicians present from all nearby states and Canada.

#### County Secretaries—Public Relations Conference

A Conference of County Secretaries and other officers and members of component county group was held in Detroit on January 25, 1948. This all-day conference was attended by over 187 County Society officers, Public Relations Committee Chairman and representatives of the Woman's Auxiliary.

This conference featured techniques of county society organization and operation, an exposition of the major activities of the State Society as related to the County

Societies and information necessary for the development and maintenance of good public relations and public Education.

#### Committees

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees.

During 1948 the 54 committees held a total of 86 meetings and practically every meeting was attended by one or both of your Secretaries. Too much commendation cannot be accorded the committee members who gave very generously of their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

#### Rheumatic Fever Program

This society-sponsored program of consultation and diagnosis in the field of Rheumatic Fever demonstrates the voluntary approach in the field of preventive medicine. There are now operating or in the process of development over thirty centers in Michigan. To these centers in the short space of less than three years over 4,000 cases have been referred by more than 500 members of the society.

The Michigan Society for Crippled Children and Adults, Inc., has continued its generous financial support of the Rheumatic Fever Program and in 1948 contributed \$21,421.73 for its administrative expenses.

During 1948 The Council approved the employment of a full-time co-ordinator for the program and were fortunate in securing the services of Leon DeVel, M.D., of Grand Rapids who will assume his duties in January, 1949.

#### Michigan Heart Association

The rapidly increasing Rheumatic Fever Program developed the need of establishing a project to include studies and activities in other forms of Heart disease. The Council in 1948 approved the formation of a Michigan Heart Association under the aegis of the State Society as an affiliate of the American Heart Association. This association is now in the process of organization and will further broaden the scientific activities of the State Society.

#### Contacts with Governmental Agencies

During 1948 your Society maintained active and friendly contacts with many governmental agencies at local, county, state, and national levels. Included in these contacts were:

- The Governor of Michigan
- The Michigan Crippled Childrens Commission
- The State Board of Registration in Michigan
- The Basic Science Board
- The State Department of Public Instruction
- The University of Michigan
- The Michigan State College
- Wayne University
- The State Association of County Supervisors and Social Welfare Agencies
- The State Association of Registers of Deeds
- Federal Hospital Survey and Construction Administration
- The U.S. Senators and Congressmen from Michigan
- The State Health Commissioner
- The Michigan Prison Commission

#### Contacts with Non-Governmental Agencies

During 1948 the usual active contacts were maintained with many non-governmental agencies—especially



Michigan Medical Service  
 Michigan Hospital Service  
 Michigan Society for Crippled Children and Adults, Inc.  
 Michigan Health Council  
 The State Associations of  
   Nursing  
   Pharmacy  
   Dentistry  
 The State Tuberculosis Association  
 The Michigan Foundation for Medical and Health Education  
 The Michigan Hospital Association

### Courses in Medical Economics

For the second year this program of Medical Economics lectures has been continued before various classes at the Medical Schools of the University of Michigan and Wayne University. These lectures given by practicing physicians have been very well received and over a period of time should be reflected favorably in the attitudes of our future doctors of medicine—especially in the field of public education and public relations.

### Distinguished Health Service Awards

The second series of awards was made in 1948 to:

Henry F. Vaughn, Dr.P.H.  
 Dean of the School of Public Health University of Michigan.  
 Emory L. Morris, D.D.S.  
 Director of the Kellogg Foundation.

### Brochure on Medical Associates

In 1948 The Society through its Commission on Health Care published a brochure on the subject of Medical Associates. This brochure has had an enthusiastic reception by medical agencies and educators in Michigan and elsewhere. Its contents have a distinct bearing on health services and contributes to a better distribution of medical personnel.

### Society Activities

Many contacts were made during the year with members of the Society at Councilor District meetings and County Society meetings. These contacts were made by various members of the administrative personnel and were designed to publicize the various activities of the State Society and to allow a discussion of any question propounded by the members present. These meetings developed a critical discussion of the problems of the local and State organizations, problems of public relations, the "impractices" of medicine and other subjects bearing upon the development and maintenance of activities necessary to the establishment of medical practice on its deserving high plane.

### Public Relations

The most significant aspect of the MSMS Public Relations Program is its foresightedness. Only by a continual evaluation of the present can the future be correctly anticipated. And only by keen analysis of what can be expected tomorrow, next week, next month and next year can a public relations program stay "on top" of the situation. Indeed, it is for this reason, as well as because of an ably administered plan of action, that Michigan has successfully pioneered in nearly every phase of modern medical public relations.

Let's look at the record. We can dismiss the routine news releases, the outstanding news coverage of our assemblies, the constant inter-membership communication media, interested organizations, and radio medical talks such as those heard over the University of Michigan network. These are the taken-for-granted parts of any public relations effort. They have been done in full

measure, and regardless of the new projects undertaken have continued unabated.

We can review with pride the development within the past few years of the Michigan Rural Health Conference, the award system (you will recall the development of the Outstanding Health Service Awards, the start of the Michigan's Foremost Family Physician Award, the Fifty Year Club, et cetera; the displays (I refer to the display such as that at the AMA meeting this year); the Michigan Health Survey; the *PR Bylines* bulletin and the "PR in Practice" page of *THE JOURNAL*, the Public Speaking program in which so much time has been invested by our members; the newspaper advertising program; the development of close publicity liaison with ancillary groups; the preparation of a sound program through the Woman's Auxiliary brochure for our whole state and county auxiliaries; the development of an immunization campaign; political and legislative activity, the distribution of the film, "Be Your Age," and with it 90,000 "Your Child is Safer in Michigan" pamphlets.

Yes, we can review these with the certain knowledge that every opportunity has been taken to successfully build public confidence in the medical profession of Michigan.

But we have gone further. We produced the first medical public relations movie, "Lucky Junior," a film which within a few short months will complete its run in Michigan theaters, viewed by a million persons. This film is being demanded by health and educational organizations from, literally speaking, coast to coast. It is being made available to these organizations, and throughout 1949 will be seen in Michigan in non-commercial showings. The film is a triumph in its field.

Consider the "Tell Me, Doctor" program. Twenty-three stations in Michigan carry this program *daily*. Forty stations outside Michigan broadcast it. We expect over 200 stations outside Michigan to be carrying it regularly before the year is out. This program has already been heard *more times than all other medically sponsored radio programs in the United States PUT TOGETHER*.

The Medical Associates brochure has taken the country by storm. On *individual* requests over 3,500 have been distributed, not to mention the regularly planned distribution. An example of the enthusiastic acceptance of this program is that given it by Dr. Karl Menninger of Kansas who has personally placed this as a must in every major health organization and educational department and institution of that state.

I could go on and cite the fact that the Michigan Rural Health Conference has been named as the outstanding state rural health conference in the nation and its explanation will be heard on a nation-wide radio network. I could point to the, again literally speaking, hundreds of requests for aid in planning PR programs and specific parts of PR programs from other states and other medical organizations. I could mention such things as the Social Hygiene (Sex Education) program that even before its complete inception will be given national attention. And yet again point to the reactivated Michigan Health Council.

But I will leave those programs to call your attention to two basic parts of our PR Program. One is the development of an acute awareness and action to reduce "impractices" on the part of our more wayward members (the iniquitous 3 per cent). The other is the grass roots program of Co-operation with the American People making each member of our Society a public relations representative of medicine. This program and the six PR Field Secretaries who are carrying it to the furthest corners of our State is *The plan of the hour*. When it is adopted by the other states—and other states have already adopted it—and by the AMA, it will do more than any other single effort to keep American medicine free and to present to the American people the information which they need and must have to maintain our country in greatest health.



I know you take pride in being part of this program, secure in the knowledge that Michigan will not cease to lead the van in today's American health crusades, for we have the vision and the know-how and the determination to do the job. I am particularly proud because we have obtained our present nationally accepted position without fanfare or self-applause, and with both the monetary, mental and physical support of our entire membership.

#### Secretary's Letters

As part of the Society's general educational program for individual members and component county societies there were issued during the year nine Secretary's Letters, six to county secretaries and keymen and three to all members of the Michigan State Medical Society.

#### Office Personnel

During 1948 various replacements and additions have been made to the Executive Office personnel. The resignation of Assistant Executive Director, Mr. Henry Hopp, Jr., necessitated a replacement in the person of Mr. Robert Roney. The continued increase in the tempo of Society activity made necessary the employment of several individuals, particularly in the department of Public Relations.

The crowded and scattered condition of our Executive Offices is working an ever-increasing hardship on the whole office personnel and is not conducive to good morale and the greatest efficiency.

#### Foremost Family Physician Award

The second annual "Foremost Family Physician Award" was accorded J. S. DeTar, M.D., Speaker of the House of Delegates. The award will be officially made in March, 1949, on the occasion of the Michigan Postgraduate Clinical Institute.

#### Summary

A summary of the outstanding activities of 1948 should include the following:

- A full-time co-ordinator for the Rheumatic Fever Program
- Settlement of the Mercy Hospital—Michigan Hospital Service matter
- Adoption of a revised Constitution and By-laws
- Reactivation of the Michigan Health Council
- Development of a CAP program (Co-operation with the American People)
- Attempts to increase Medical School graduates
- Investigation of needs for more VA beds.
- Formation of Michigan Heart Association
- Creation of two new Councilor Districts
- Encourage formation of a national agency for Voluntary Health Service (AMA decided on a National Enrollment plan)
- Publication of Medical Associates brochure
- Employment of six field secretaries to increase the coverage of our Public Education program during the present emergency.

#### Recommendations

As a result of a careful analysis of the Society's activities, the prospective economic conditions and the attitude of the public toward medical organizations, I respectfully submit the following recommendations for your consideration:

1. That all county medical societies conduct a vigorous and spirited counter attack against present attempts to socialize medicine by impressing every member with his responsibility in this contest. Such a campaign will require his every resource; the payment of the \$25.00 AMA assessment is only a small part of his responsibility.
2. That every society hold one or more CAP meetings to establish a continuing awareness of the present serious problems confronting health care and that a cordial reception be given the Field Secretary on his visit to the county society.

3. That more office facilities be provided the Executive Offices at the earliest possible moment.

4. That in view of the fact that a large expenditure of funds is involved in the CAP program and since the development of the program and the expenditures have been delegated to a special Committee on Education, there should be a monthly itemized report of all expenditures made to the Executive Committee for its approval.

\* \* \*

Your Secretary desires to express to the members of The Council his sincere appreciation for their fine personal and collective co-operation and the encouragement they have accorded him during 1948.

To the Executive Office personnel, Mr. H. W. Brennehan, Public Relations Counsel, Mr. J. Joseph Herbert, Legal Counsel, and to Dr. Wilfrid Haughey, Editor, your Secretary is particularly grateful for their loyalty, willing application to their many tasks and many constructive suggestions. To Executive Director Mr. Wm. J. Burns, I wish to express a special appreciation for his wise counsel, helpful co-operation, and dynamic inspiration.

To all those who have aided so generously in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,

L. FERNALD FOSTER, M.D.  
Secretary

#### EDITOR'S ANNUAL REPORT—1948

THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, in completing another year, has again published a few less pages. We followed the plan of the former year of devoting less space to some of the material referring to war medicine, especially. The subject of "Socialized Medicine" has held our attention for several years, and in the last few months it has greatly increased in interest. We have again endeavored to keep our readers well posted on the socioeconomic problems confronting us. We plan to use THE JOURNAL in this educational endeavor more and more—believing that to be one of the surest methods of reaching our membership. We are co-operating with the increased public relations job of the Society.

During the year 1948, we have published many original articles covering every phase of the practice of medicine, and some intimately related matters of general interest to our physicians. One hundred and four different authors appear in our pages, and only four have repeated. This is an increase from ninety-six last year, with seven names repeating.

Sixty-one editorials have been prepared and published dealing with a multitude of subjects, but keeping the socialized medicine problem constantly before us. Some have been copied by other journals, and one was mentioned in *Medical Economics*, the one entitled "Take-home Pay."

Ninety-six book reviews have been published. Ninety-two death notices included one concerning Mr. Frank E. McAllister who was treasurer of Michigan Medical Service and a close friend of medicine.

THE JOURNAL has been delivered mostly during the first week after the publication date month. We have tried to catch up, and a few months did make our date month, but there is still a problem of production.

The appearance of THE JOURNAL has held up to standard. In fact, we think it has improved, and we are very proud of our covers for the year; no other state medical journal has approached our variety and interest. Each month we have featured some activity of the Society or interest of the profession, and plans are made to continue this plan in 1949. We believe our members will be pleased.

The Editor expresses his thanks to the Publication Committee for many suggestions, and valuable hints, also to the other officers of the Society and to those in the Executive Office.

Respectfully submitted,

WILFRID HAUGHEY, M.D., Editor

## TREASURER'S ANNUAL REPORT—1948

The Changes in Bonds owned during the year were as follows:

Balance at January 1, 1948.....\$83,125.90

## ADDITIONS

Purchase of United States Savings Bonds, Series G, 2½, maturing Mar. 1, 1960.....\$ 5,000.00

Increase in redemption value of United States Savings Bonds, acquired in prior years..... 148.20

Received from Wm. A. Hyland, M.D., Trustee:

1—Grand Rapids Affiliated Corporation, 5% Bond, maturing Oct. 1, 1955, (Principal Amount \$1,000.00).....

Market Value..... 730.00

1—Southern Pacific Company, 4½% Bond, maturing Mar. 1, 1977, (Principal Amount \$1,000.00),.....

Market Value..... 472.50

\$ 6,350.70

\$89,476.60

## REPRESENTED BY:

Bonds held for general purposes.....\$59,476.60

Bonds designated for the Michigan State

Medical Society Public Education Program.....\$30,000.00

\*Balance at December 31, 1948.....\$89,476.60

\*Actual cost of Bonds.

## INCOME

Earnings on Bonds at Jan. 1, 1948, to Jan. 1, 1949.....\$ 2,272.50

Cash Balance in Bank, at Jan. 1, 1948..... 4,440.03

TOTAL.....\$ 6,712.53

(No Securities sold during 1948)

## EXPENSE

Bank Service Charge.....\$ 1.74

Bank Charges for Safe-keeping of Bonds..... 86.50

Purchase of United States Savings Bond, Series G.....\$ 5,000.00

\$ 5,088.24

CASH IN BANK.....\$ 1,624.29

CASH IN BANK.....\$ 1,624.29

MARKET, OR REDEMPTION PRICE OF

ALL BONDS, as of Dec. 24, 1948.....\$87,205.10

TOTAL.....\$88,829.39

The actual cost of these Bonds is \$89,476.60, which includes the purchase price of interest bearing bonds, and purchase price of Bonds bought on a discount basis, plus adjusted increase in value of the latter group.

Respectfully submitted,  
A. S. BRUNK, M.D., *Treasurer*

SECURITIES IN POSSESSION OF TREASURER  
January 1, 1949

Description	Interest Rate	Maturity	Interest Paid to	Principal Amount	Cost	Market or Redemption Prices 12-24-48
Bonds held for general purposes:						
Canadian Pacific Railway Company.....	4%	Perpetual	July 1-1948	\$ 2,000.00	\$ 1,855.00	\$ 1,880.00
Detroit Edison Company.....	3½%	Sept. 1-1966	Sept. 1-1948	2,000.00	2,187.50	2,016.00
Grand Rapids Affiliated Corporation.....	5	Oct. 1-1955	Oct. 1-1948	2,000.00	1,650.00	1,900.00
New York Central Railroad Company.....	4	Feb. 1-1998	Aug. 1-1948	2,000.00	1,173.75	1,200.00
Southern Pacific Company.....	4½	Mar. 1-1977	Sept. 1-1948	2,000.00	1,322.50	2,030.00
United States Savings Bond, Series G.....	2½	Jan. 1-1957	Dec. 1-1948	5,000.00	5,000.00	4,735.00
United States Savings Bonds, Series G.....	2½	Feb. 1-1957	Aug. 1-1948	17,600.00	17,600.00	16,684.00
United States Savings Bond, Series G.....	2½	June 1-1957	Dec. 1-1948	5,000.00	5,000.00	4,740.00
United States Savings Bonds, Series G.....	2½	Dec. 1-1957	Dec. 1-1948	1,000.00	1,000.00	956.00
United States Savings Bonds, Series G.....	2½	May 1-1958	Nov. 1-1948	5,000.00	5,000.00	4,780.00
United States Savings Bonds, Series G.....	2½	Mar. 1-1960	Sept. 1-1948	5,000.00	5,000.00	4,940.00
United States Savings Bonds, Series D.....	Note A	Apr. 1-1949		1,300.00	1,274.00	1,274.00
United States Savings Bonds, Series F.....	Note A	May 1-1953		2,500.00	2,152.50	2,152.50
United States Savings Bonds, Series F.....	Note A	July 1-1953		700.00	593.60	593.60
United States Savings Bonds, Series F.....	Note A	Sept. 1-1953		500.00	424.00	424.00
United States Treasury Bonds.....	2½	Dec. 15-1972-67	Dec. 15-1948	8,000.00	8,243.75	8,040.00
Bonds held for Public Education Program:						
United States Savings Bonds, Series G.....	2½	Aug. 1-1958	Aug. 1-1948	30,000.00	30,000.00	28,860.00
TOTAL				\$91,600.00	\$89,476.60	\$87,205.10

NOTE A—Bonds purchased on discount basis.

Do not bear interest.

MARCH, 1949

## MSMS BUDGETS—1949

## GENERAL FUND

## INCOME

4,400 Members at \$12 Dues .....\$ 52,800.00

Less Allocation to Journal at \$1.50 ..... 6,600.00

\$ 46,200.00

Interest Income ..... 1,500.00

Miscellaneous Income ..... 100.00

TOTAL INCOME .....\$ 47,800.00

From Reserves ..... 15,870.00

\$ 63,670.00

## APPROPRIATIONS

## Administrative and General:

Office Rent and Light .....\$ 1,800.00

Printing, Stationery and Supplies ..... 2,000.00

Postage ..... 2,000.00

Insurance and Fidelity Bonds ..... 3,680.00

Auditing ..... 700.00

Administrative Salaries ..... 7,000.00

Office and General Salaries ..... 8,640.00

General Counsel ..... 3,000.00

General Counsel Expense ..... 700.00

New Equipment and Repairs ..... 1,000.00

Telephone and Telegraph ..... 1,200.00

Payroll Taxes ..... 1,250.00

Miscellaneous General Expense ..... 500.00

\$ 33,470.00

## Society Activity:

Council Expense .....\$ 2,500.00

Delegates to A.M.A. .... 2,500.00

General Society Travel ..... 900.00

Officers Travel ..... 750.00

National Conference on Medical Service ..... 250.00

Secretary's Letter ..... 500.00

Woman's Auxiliary—Annual Meeting ..... 300.00

Sundry Society Expense ..... 700.00

\$ 8,400.00

## Committee Expense:

Legislative Committee .....\$ 2,500.00

Distribution of Medical Care ..... 50.00

Postgraduate Medical Education ..... 5,000.00

Preventive Medicine ..... 100.00

Cancer Control ..... 5,000.00

Child Welfare ..... 125.00

Geriatrics ..... 100.00

Industrial Health ..... 50.00

Maternal Health ..... 75.00

Mental Hygiene ..... 50.00

Scientific Radio ..... 50.00

Venereal Disease Control ..... 300.00

Tuberculosis Control ..... 50.00

Ethics ..... 50.00

Michigan Health Council ..... 7,500.00

Sundry Other Committees ..... 800.00

\$ 21,800.00

GRAND TOTAL (Expenses) .....\$ 63,670.00

GAIN OR LOSS—Loss .....\$ 15,870.00



# ANNUAL SESSION OF THE COUNCIL

## THE JOURNAL

<b>INCOME</b>	
Subscriptions (4,400 at \$1.50)	\$ 6,600.00
Other Subscriptions	400.00
Advertising Sales	40,000.00
Reprint Sales and Cuts	2,500.00
<b>TOTAL INCOME</b>	<b>\$ 49,500.00</b>
<b>EXPENSES</b>	
Printing and Mailing	\$ 28,225.00
Reprint and Cut Expense	1,875.00
Disc. and Com. on Adv. Sales	8,900.00
Salaries	8,300.00
Editor's Expense	1,800.00
Miscellaneous Journal Expense	400.00
<b>TOTAL EXPENSES</b>	<b>\$ 49,500.00</b>

## HOUSE OF DELEGATES BUDGET

<b>EXPENSE:</b>	
Printing of Handbook	\$ 300.00
Reporting of Proceedings	350.00
Reprints of Proceedings	150.00
Delegates' Breakfast	400.00
Miscellaneous Expense	100.00
	<b>\$ 1,300.00</b>
Commission on Health Care	100.00
<b>TOTAL EXPENSES</b>	<b>\$ 1,400.00</b>

## PUBLIC EDUCATION ACCOUNT

<b>INCOME:</b>	
Estimated Income from Assessment (4,400 at \$25.00)	\$110,000.00
	<b>\$110,000.00</b>
<b>EXPENSES:</b>	
Clipping Service	\$ 300.00
Committee Meeting Expense	1,200.00
New Equipment and Repairs	200.00
Postage	1,000.00
Printing, Stationery and Supplies	1,000.00
Office Rent and Light (\$125.00 month; \$50.00 light; \$250.00 repairs)	1,800.00
Salaries	17,790.00
Telephone and Telegraph	1,200.00
Travel Expense	2,200.00
Cinema	20,000.00
Display Advertising	1,000.00
Newspaper Advertising	12,000.00
Publications and pamphlets	5,000.00
Radio—"Tell Me, Doctor" Programs	19,000.00
School—Sex Education and Libraries	200.00
National Meeting Expense	500.00
Annual Co. Secy's.—P.R. Conference	3,000.00
Miscellaneous General Expense	1,000.00
<b>TOTAL EXPENSES</b>	<b>\$ 88,390.00</b>
To Contingency Reserve	21,610.00
	<b>\$110,000.00</b>

## PUBLIC EDUCATION RESERVE

<b>RESERVE</b>	<b>\$100,000.00</b>
<b>ESTIMATED EXPENSES:</b>	
Salaries (for 12 months)	\$ 40,480.00
Printing, Stationery and Supplies	5,000.00
Postage	2,000.00
Telephone and Telegrams	2,000.00
Travel (for 12 months)	15,000.00
Office equipment	500.00
Publications and Pamphlets	500.00
Meeting Expense	
(a) Special Comm. on Education	500.00
(b) Field Secretaries	2,000.00
(c) County Societies' and other meetings	4,150.00
Program (radio, cinema, newspapers)	15,000.00
Woman's Auxiliary	600.00
Other activities	2,000.00
Miscellaneous Expense	900.00
<b>TOTAL EXPENSES</b>	<b>\$ 90,630.00</b>
For Contingencies	\$ 9,370.00
	<b>\$100,000.00</b>

## RHEUMATIC FEVER CONTROL PROGRAM

<b>INCOME:</b>	
Balance as of December 24, 1948	\$ 10,084.28
Anticipated Contribution from Michigan Society for Crippled Children and Adults, Inc.	15,000.00
Anticipated Contribution from Michigan Heart Association	30,715.72
<b>TOTAL REQUIRED INCOME</b>	<b>\$ 55,800.00</b>

## EXPENSES:

<b>Central Office (Lansing)</b>	
Travel	\$ 2,000.00
Equipment and supplies	1,000.00
Printing, Stationery and Supplies	500.00
Postage	400.00
Payroll Taxes	300.00
Committee Meetings	1,800.00
Educational Conferences	3,000.00
Publications and Pamphlets	3,000.00
Miscellaneous Expense (including exhibit)	500.00
Salaries—Administrative	8,000.00
Salaries—General Office	600.00
	<b>\$ 21,100.00</b>

## EXPENSES OF CENTERS:

Alpena	\$ 1,500.00
Ann Arbor	1,500.00
Battle Creek	1,500.00
Bay City	2,000.00
Flint	1,500.00
Grand Rapids	3,500.00
Jackson	1,500.00
Kalamazoo	1,500.00
Lansing (incl. \$600 for part time Secretary)	1,500.00
Marquette	2,700.00
Muskegon	1,500.00
Pontiac	1,500.00
Port Huron	1,500.00
Saginaw	1,500.00
St. Joseph—Benton Harbor	1,500.00
Traverse City	1,500.00
Detroit (Wayne Co.—16 Centers)	7,000.00
	<b>\$ 34,700.00</b>

<b>TOTAL EXPENSES</b>	<b>\$ 55,800.00</b>
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## CANCER CONTROL COMMITTEE

(October 1, 1948—September 30, 1949)

## CASH ON HAND

Cash on hand September 30, 1948	\$ 4,757.14
Balance of Encumbered Bulletin Fund	8,005.44

	<b>\$ 12,762.58</b>
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## INCOME:

Michigan State Medical Society	\$ 5,000.00
American Cancer Society	5,737.42
	<b>\$ 10,737.42</b>

<b>Total Funds Available</b>	<b>\$ 23,500.00</b>
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## EXPENSES:

Secretary, Salary	\$ 7,000.00
Travel Expenses	1,000.00
Stenographer, Salary	600.00
Social Security Taxes	50.00
Telephone and Telegraph	300.00
Office Expense	250.00
Committee Expense	500.00
Michigan Cancer Bulletin, Vol. II.	10,000.00
	<b>\$ 19,700.00</b>

For Contingencies	3,800.00
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<b>\$ 23,500.00</b>
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## REPORT OF ERNST & ERNST

We have examined the balance sheet of Michigan State Medical Society as of December 24, 1948, and the related statements of income and expense and surplus for the period from January 1, 1948, to December 24, 1948. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and expense present fairly the financial position of Michigan State Medical Society at December 24, 1948, and its income and expense for the period from January 1, 1948, to December 24, 1948, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

January 15, 1949

Certified Public Accountants

JMSMS

## ANNUAL SESSION OF THE COUNCIL

## BALANCE SHEET—December 24, 1948

## ASSETS

Cash		
Demand deposits .....	\$ 24,954.22	
Cash for deposit .....	848.32	
Office cash fund .....	12.00	
Savings deposits—Note A .....	70,619.47	\$ 96,434.01
Accounts Receivable		
Advertising .....	\$ 3,248.97	
Space at 1949 Postgraduate Clinical Conference .....	5,200.00	
	\$ 8,448.97	
Less allowance for losses in collection .....	100.00	8,348.97
Securities—at cost (aggregate market or redemption prices \$87,205.10) United States Government bonds—Note A .....	\$ 81,287.85	
Other bonds .....	8,188.75	89,476.60
		<u>\$194,259.58</u>

## LIABILITIES

Accounts Payable		
Current expenses and miscellaneous liabilities .....	\$ 2,770.92	
Payroll taxes .....	347.89	3,118.81
Unearned Income		
Dues for the year 1949 .....	\$ 333.00	
Sales of space for 1949 Postgraduate Clinical Conference .....	8,260.00	8,593.00
Reserves—for unexpended funds received for special purposes		
Public Education Program .....	\$100,000.00	
Rheumatic Fever Control Program .....	10,084.28	
Lecture grant (no change in 1948) .....	500.00	110,584.28
Surplus		
Balance at January 1, 1948 .....	\$ 80,575.85	
Net expenses for the period from January 1, 1948, to December 24, 1948 .....	8,612.36	71,963.49
		<u>\$194,259.58</u>

NOTE A—Savings deposits in the amount of \$70,000.00 and United States Government bonds in the amount of \$30,000.00 have been designated as applicable to the reserve for Public Education Program.

## INCOME AND EXPENSE STATEMENT

## From January 1, 1948, to December 24, 1948

Income		
Membership fees .....	\$ 55,578.93	
Dues of military members paid in prior years and carried as deferred income .....	2,400.00	
	\$ 57,978.93	
Less portion allocated to income of "The Journal" for subscriptions .....	7,251.76	\$ 50,727.17
Income from "The Journal" .....		6,372.37
Interest:		
On securities .....	\$ 2,420.70	
On time deposits .....	621.50	3,042.20
Adjustment of estimated liability provided for in prior year .....		5,000.00
Assets received on liquidation of trusteeship of William A. Hyland .....		4,462.84
Miscellaneous income .....		75.00
TOTAL INCOME .....		<u>\$ 69,679.58</u>
Expenses		
Administrative and general .....	\$ 35,723.82	
Society activities .....	15,649.58	
Annual and special sessions .....	2,081.46	
Committee expenses .....	14,548.29	
Portion of expenses of Public Education Program .....	10,288.79	78,291.94
NET EXPENSES .....		<u>\$ 8,612.36</u>

## PUBLIC EDUCATION PROGRAM

## From January 1, 1948, to December 24, 1948

Balance of unexpended funds at January 1, 1948, as reflected in reserve .....	\$ 70,793.96
Net income for the period, as shown below .....	29,206.04
Balance of unexpended funds at December 24, 1948, as reflected in reserve .....	<u>\$100,000.00</u>

## INCOME AND EXPENSES

Income from assessment of members .....	\$115,779.07
Expenses:	
Salaries .....	\$ 12,680.96
Rent and light .....	523.86
Telephone and telegraph .....	1,170.39
Printing, stationery, and supplies .....	996.28
Postage .....	1,485.93
Office equipment and repairs .....	688.49
Travel .....	1,667.76
Public relations and secretary's conferences .....	3,077.58
Purchase of pamphlets .....	2,957.34
National conference on medical service .....	719.39
Committee meetings .....	846.45
Newspaper programs .....	13,490.25
Radio programs .....	27,433.01
School program and libraries .....	852.65
Display .....	332.21
Cinema .....	15,096.82
Rural health conference .....	2,966.06
Commission on health care (a committee of Hse of Del.) .....	8,383.56
Miscellaneous .....	1,492.83

TOTAL EXPENSES .....	\$ 96,861.82
Less expenses charged to general expenses of Society .....	10,288.79
	<u>\$ 86,573.03</u>

NET INCOME .....	<u>\$ 29,206.04</u>
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## RHEUMATIC FEVER CONTROL PROGRAM

## From January 1, 1948, to December 24, 1948

Balance of unexpended funds at January 1, 1948, as reflected in reserve .....	\$ 4,849.78
Grants from Michigan Society for Crippled Children and Adults, Inc. ....	21,421.73
	<u>\$ 26,271.51</u>
Less expense for the period, as shown below .....	16,187.23
Balance of unexpended funds at December 24, 1948, as reflected in reserve .....	<u>\$ 10,084.28</u>

## EXPENSES

Expense of central office:	
Salaries .....	\$ 499.99
Equipment and supplies .....	980.66
Committee meetings .....	706.27
Payroll taxes .....	43.00
Publications and pamphlets .....	1,129.74
Travel .....	170.45
Miscellaneous .....	4.12
	<u>\$ 3,534.23</u>
Expenses of local consultation and diagnostic centers—advances and expenses:	
Alpena .....	\$ 527.24
Ann Arbor .....	—
Bay City .....	1,604.00
Detroit and Wayne .....	3,500.00
Grand Rapids .....	2,514.39
Jackson .....	—
Kalamazoo .....	1,000.00
Lansing .....	507.37
Marquette .....	2,000.00
Pontiac .....	—
Port Huron .....	—
Saginaw .....	500.00
Traverse City .....	500.00
	<u>\$ 12,653.00</u>
TOTAL EXPENSES .....	<u>\$ 16,187.23</u>

## Comments

The Michigan State Medical Society was organized on September 17, 1910, under the laws of the State of Michigan as a corporation not for pecuniary profit. The charter was extended on November 10, 1941, for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health, and the betterment of the medical profession. In the furtherance of these purposes the Society publishes "The Journal of the Michigan State Medical Society."



## ANNUAL SESSION OF THE COUNCIL

The balance sheet at December 24, 1948, is summarized as follows:

ASSETS	
Cash .....	\$ 96,434.01
Accounts receivable .....	8,348.97
Securities .....	89,476.60
	<u>\$194,259.58</u>
LIABILITIES	
Accounts payable .....	\$ 3,118.81
Unearned income .....	8,593.00
Reserves for unexpended funds received for special purposes .....	110,584.28
Surplus .....	71,963.49
	<u>\$194,259.58</u>

Schedules included hereinafter show in greater detail the income from "The Journal" and the expenses of the Society in comparison with the respective budgets. "The Journal," as in prior years, has been allotted \$1.50 from each membership fee.

Accounts receivable for advertising were classified as to period of charge and are summarized in comparison with a similar classification at December 31, 1947, as follows:

PERIOD OF CHARGE	December 24, 1948	
	Amount	Per cent
October, November, and December .....	\$3,133.50	96.45%
July, August, and September .....	68.50	2.11%
January to June, inclusive .....	46.97	1.44%
TOTAL .....	<u>\$3,248.97</u>	<u>100.00%</u>

Our examination of accounts receivable as of December 24, 1948, included tests of the balances by communication with selected debtors. It is our opinion that the allowance of \$100.00 is sufficient for losses in collection of the accounts.

The changes in bonds owned during the period were as follows:

Balance at January 1, 1948 .....	\$ 83,125.90	
ADDITIONS		
Purchase of \$5,000 United States Savings Bonds, Series G, maturing March 1, 1960 ..	\$ 5,000.00	
Increase in redemption value of United States Savings Bonds acquired in prior years ....	148.20	
Bonds transferred from trusteeship of William A. Hyland (on basis of cost):		
\$1,000 Grand Rapids Affiliated Corporation, 5%, maturing October 1, 1955 .....	\$730.00	
\$1,000 Southern Pacific Company, 4½%, maturing March 1, 1977 .....	472.50	1,202.50
Balance at December 24, 1948, (of which bonds in the amount of \$30,000.00 have been designated for the Public Education Program) .....		<u>\$ 89,476.60</u>

Bonds owned at December 24, 1948, have been stated at cost, adjusted for increases in redemption price of United States Savings Bonds. We inspected the bonds and accounted for the income from bonds for the period. At December 24, 1948, the aggregate cost of the bonds owned was \$2,271.50 greater than the aggregate market or redemption prices. Details of the bonds are shown in a schedule in this report.

The Executive Committee, in its meeting of April 21, 1948, designated \$40,000.00 of the cash in savings accounts for the use of the Public Education Program. This amount is in addition to cash in savings accounts, in the amount of \$30,000.00, and United States Savings

Bonds, Series G, in the amount of \$30,000.00, designated for the same purpose in prior years. Unexpended funds designated for the Public Education Program at December 24, 1948, aggregated \$100,000.00.

The Society has a policy of waiving payment of dues by members in military or naval service and, in the event the dues were paid for the year of induction, to allow free membership for a designated period following discharge from service. The balance of \$2,400.00 for dues paid in prior years and classified as unearned dues at December 31, 1947, was taken into income in 1948, inasmuch as few paid-up members now remain in the Armed Services.

The Council, in its meeting of January 24, 1948, approved the dissolution of the trust of which William A. Hyland was trustee for the Society. Upon dissolution the following assets were transferred to the Society:

Cash:	
Balance at January 1, 1948 .....	\$ 3,235.34
Interest subsequently received—Grand Rapids Affiliated Corporation bond.....	25.00
Balance at date of dissolution .....	<u>\$ 3,260.34</u>
Bonds—at cost:	
Grand Rapids Affiliated Corporation, 5%, due October 1, 1955 .....	\$ 730.00
Southern Pacific Company, 4½%, due March 1, 1977 .....	472.50
	<u>1,202.50</u>
TOTAL .....	<u>\$ 4,462.84</u>

The assets transferred from the trust have been included in income of the Society for the period.

A statement of the expenses of the Committee on Rheumatic Fever Control is included in this report. A contribution of \$21,421.73 was received during the year from The Michigan Society for Crippled Children and Adults, Inc., to be used in the furtherance of the Society's rheumatic fever program. The unexpended balance of the contributions received has been reflected as a reserve in the accompanying balance sheet.

## EXPENSES

## From January 1, 1948, to December 24, 1948

Administrative and general:	
Salaries—administrative .....	\$ 6,999.92
Salaries—office .....	6,198.34
General counsel .....	3,472.47
Office rent and light .....	1,584.30
Printing, stationery, and supplies .....	2,059.33
Postage .....	1,957.54
Insurance and fidelity bonds .....	3,677.31
Audit .....	695.00
New equipment and repairs .....	5,105.85
Telephone and telegraph .....	2,185.73
Payroll taxes .....	1,249.15
Miscellaneous .....	538.88
TOTAL .....	<u>\$ 35,723.82</u>
Society activities:	
Council expense .....	\$ 7,657.68
Delegates to American Medical Association .....	2,207.31
House of Delegates expense .....	949.80
General society travel .....	1,708.78
Officers' travel expense .....	1,294.40
National conference on medical service .....	337.46
Secretary's letter .....	195.70
Women's auxiliary—annual meeting .....	600.00
Sundry society expense .....	698.45
TOTAL .....	<u>\$ 15,649.58</u>

## Annual and special sessions:

Annual session:	
Scientific meeting .....	\$ 2,952.16
Exhibit .....	3,610.39
Housing committee .....	141.46
Lantern slides .....	161.77
Mailing and postage .....	381.01
Officers' night and Biddle oration .....	572.05
Press .....	869.87
Printing .....	1,811.91
Registration .....	720.36
Salaries .....	3,699.83
State society night .....	420.34
Staff expense .....	262.66
Gratuities to hotel staff .....	214.60
Miscellaneous general expense .....	943.77

\$ 16,762.18

JMSMS

## ANNUAL SESSION OF THE COUNCIL

Postgraduate Clinical Institute:	
Salaries .....	\$ 2,054.91
Scientific meeting, Committee meetings, Printing	
Mailing and postage, Exhibits, Press, Registration.	
Smoker, Hotel expense, Housing committee expense, and Miscellaneous .....	4,479.37
	<u>\$ 6,534.28</u>
	\$ 23,296.46
Less sales of display space:	
Annual session .....	\$ 13,580.00
Postgraduate clinical institute .....	7,635.00
	<u>\$ 21,215.00</u>
NET TOTAL .....	<u>\$ 2,081.46</u>
Committee expense:	
Cancer .....	\$ 5,000.00
Child welfare .....	120.86
Heart and degenerative diseases .....	93.85
Industrial hygiene .....	50.26
Legislative .....	2,238.58
Maternal health .....	77.53
Mental hygiene .....	37.68
Postgraduate medical education .....	5,548.50
Preventive medicine .....	59.17
Scientific radio .....	44.67
Scientific work .....	183.27
Tuberculosis control .....	37.68
Venereal disease control .....	217.08
National emergency medical service .....	28.50
Sundry other (including committees of The Council) ....	810.66
TOTAL .....	<u>\$ 14,548.29</u>

## CASH—December 24, 1948

Demand deposits:	
Michigan National Bank, Lansing—	
general account .....	\$ 23,329.93
The Detroit Bank—Treasurer's account ....	1,624.29
	<u>\$ 24,954.22</u>
Cash for deposit .....	848.32
Office change fund .....	12.00
Savings deposits—Note A:	
American State Savings Bank, Lansing .....	\$ 5,050.24
Bay City Bank, Bay City .....	5,048.18
Citizens Commercial & Savings Bank, Flint .....	5,035.42
Dort National Bank, Mason .....	5,037.50
The Detroit Bank, Detroit .....	5,049.22
East Lansing State Bank, East Lansing ....	5,037.50
Grand Ledge State Bank, Grand Ledge ....	5,037.50
Holt State Bank, Holt .....	5,037.77
Lakeview State Bank of Battle Creek .....	5,025.00
Bank of Lansing, Lansing .....	5,050.12
The Manufacturers National Bank of	
Detroit .....	5,049.12
Michigan National Bank, Lansing .....	5,061.66
Peoples Commercial and Savings Bank,	
Bay City .....	5,050.12
Wabek State Bank of Detroit .....	5,050.12
	<u>70,619.47</u>
TOTAL .....	<u>\$ 96,434.01</u>

NOTE A—Savings deposits in the amount of \$70,000.00 have been designated for the Public Education Program.

## SECURITIES—December 24, 1948

Description	Interest Rate	Maturity	Interest Paid to	Principal Amount	Cost	Market or Redemption Prices 12-24-48	Market or Redemption Prices 12-31-47	Income For Period
Bonds held for general purposes:								
Canadian Pacific Railway Company .....	4 %	Perpetual	7-1-48	\$ 2,000.00	\$ 1,855.00	\$ 1,880.00	\$ 1,900.00	\$ 80.00
Detroit Edison Company .....	3½ %	9-1-66	9-1-48	2,000.00	2,187.50	2,016.00	2,162.50	70.00
Grand Rapids Affiliated Corporation .....	5 %	10-1-55	10-1-48	2,000.00	1,650.00	1,900.00	1,920.00	100.00
New York Central Railroad Company .....	4 %	2-1-98	8-1-48	2,000.00	1,173.75	1,200.00	1,260.00	80.00
Southern Pacific Company .....	4½ %	3-1-77	9-1-48	2,000.00	1,322.50	2,030.00	1,900.00	90.00
United States Savings Bond, Series G .....	2½ %	1-1-57	12-1-48	5,000.00	5,000.00	4,735.00	4,740.00	125.00
United States Savings Bonds, Series G .....	2½ %	2-1-57	8-1-48	17,600.00	17,600.00	16,684.00	16,825.00	440.00
United States Savings Bond, Series G .....	2½ %	6-1-57	12-1-48	5,000.00	5,000.00	4,740.00	4,780.00	125.00
United States Savings Bonds, Series G .....	2½ %	12-1-57	12-1-48	1,000.00	1,000.00	956.00	962.00	25.00
United States Savings Bonds, Series G .....	2½ %	5-1-58	11-1-48	5,000.00	5,000.00	4,780.00	4,845.00	125.00
United States Savings Bonds, Series G .....	2½ %	3-1-60	9-1-48	5,000.00	5,000.00	4,940.00	**	62.30
United States Savings Bonds, Series D .....	*	1-1-60		1,300.00	1,274.00	1,274.00	1,222.00	52.00
United States Savings Bonds, Series F .....	*	5-1-53		2,500.00	2,132.50	2,152.50	2,087.50	65.00
United States Savings Bonds, Series F .....	*	7-1-53		700.00	593.60	593.60	575.40	18.20
United States Savings Bonds, Series F .....	*	9-1-53		500.00	424.00	424.00	411.00	13.00
United States Treasury Bonds .....	2½ %	12-15-72/67	12-15-48	8,000.00	8,243.75	8,040.00	8,017.50	200.00
Bonds held for Public Education Program:								
United States Savings Bonds, Series G .....	2½ %	8-1-58	8-1-48	30,000.00	30,000.00	28,860.00	29,340.00	750.00
TOTAL .....				<u>\$ 91,600.00</u>	<u>\$ 89,476.60</u>	<u>\$ 87,205.10</u>		<u>\$ 2,420.70</u>

\*Bonds purchased on a discount basis. The amounts shown as cost of these bonds are the redemption values at December 24, 1948, and the amount of income shown for the period is the increase in redemption value over that at December 31, 1947.

\*\*These bonds were purchased in 1948.

## THE JOURNAL

From January 1, 1948, to December 24, 1948

Income:	
Subscriptions from members .....	\$ 7,251.76
Other subscriptions .....	447.00
Advertising sales .....	42,091.17
Reprint sales and cuts .....	2,696.58
	<u>\$ 52,486.51</u>
Expenses:	
Salaries .....	\$ 8,073.62
Editor's expense .....	1,849.22
Printing and mailing .....	25,013.21
Cost of reprints and cuts .....	1,833.42
Discounts and commissions on advertising sales .....	8,912.62
Miscellaneous .....	432.05
	<u>\$ 46,114.14</u>
NET INCOME .....	<u>\$ 6,372.37</u>

## MEDICINE'S SORRY PLIGHT IN ENGLAND

"Recent Impressions of Medical Practice in Great Britain" is an illuminating dissertation on England's socialized medicine by Wm. H. Sweet, M.D., published in the *New England Journal of Medicine*, February 3, 1949, page 168.

The article shows the sorry plight of not only the family doctor, but also the consultant. A quotable sentence is: "I, myself, for example, have assumed that a faculty member of the staff of a teaching hospital could be little affected by any of the bruited changes—a notion that has been sharply challenged by observations of the current status of physicians in this and other categories in Great Britain."

This article by Dr. Sweet should be read by every specialist and every practitioner of medicine in the United States. It is a "waker upper."



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## PUBLIC HEALTH LOSING PERSONNEL

Michigan's local health departments are losing much needed professional personnel to higher paying agencies and to industry.

So great is the exodus that there have been fifty-five changes in the fifty-four local health officer positions in the state in the past five years. As of January 31, nine health departments had no directors. Less than half the present health officers have been in health officer positions in the state more than three years.

Local health departments of the state have only one-third the number of nurses needed to provide basic services. Of the positions budgeted, one-fourth are vacant. Almost one-third of the nurses employed by local health departments resigned during the past year.

There has been 100 per cent turnover in the number of sanitarians working for local health departments in the past five years. A total of 255 sanitarians would be required to furnish basic services in areas where there are local health departments. Of the 163 sanitarian jobs budgeted, eighteen were vacant the last of January.

In addition to salaries commensurate with the education, training and ability required for the positions, and comparable to those paid by other agencies, an intensive training program to provide more public health personnel and a retirement plan to provide more security, are needed to improve the situation.

\* \* \*

N. Berneta Block, M.D., former consultant in maternal and child health with the Michigan Department of Health, has taken a position as assistant director in charge of Maternal and Child Health Services of the Isabella County Health Department. Recently Dr. Block was on the staff of the Vocational Rehabilitation division of the State Board of Control for Vocational Education. Previously she had served as director of maternal and child health services of the Territory of Alaska, and as health officer in Alger-Schoolcraft District and in Sanilac County.

\* \* \*

A. B. Mitchell, M.D., Medical Director of the blood plasma program of the Michigan Department of Health since 1943 and an employe of the Department since 1936, resigned January 14, to take up new duties as county health officer in Medford, Oregon.

\* \* \*

## STUDY IN DEPARTMENT

Visitors and students from China, Belgium and England came to the Michigan Department of Health during January.

Dr. Evan Yuan came from Shanghai, China, for a year's study in the biologic division of the Laboratories.

Miss Doris Walker, supervising nurse of the West Riding County Council, Yorkshire, England, studied public health administration and nursing in the Depart-

ment and elsewhere in the state during January and February. Her visit was made possible through a Florence Nightingale International Foundation Fellowship.

Dr. Van Lierde, syphilologist, from Brussels, Belgium, visited the laboratories and attended a session of the committee on the Serodiagnosis of Syphilis, as guest of Dr. Reuben Kahn of the University of Michigan.

## FILMS AND PAMPHLETS ON CANCER

The Film Loan Library of the Michigan Department of Health has four films dealing with cancer which will help in planning Cancer Control Month (April) educational activities.

*Cancer*, a 17-minute sound film for lay audiences describes early symptoms, diagnosis, treatment, cause and method of spread.

*Choose to Live*, an 18-minute sound film for high school and adult groups, is designed to offset fear of cancer. It stresses the importance of prompt attention to any of the early signs of cancer and the need for additional research. A short (11-minute) version of the film is also available.

*Time is Life*, a 19-minute sound film for college and adult audiences, emphasizes the importance of early medical advice, discusses cancer treatment and hope of cure and the purpose and activity of the American Cancer Society Field Army.

*Traitor Within*, a 15-minute, sound color, animated film for high school and adult groups, tells of normal cell growth, the lawless multiplication of cancer cells, how cancer spreads and the possibility of curing and controlling the disease through x-ray, radium and surgery.

The Department has prepared three pamphlets which are available in quantities.

*What You Need to Know About Cancer*, a popular leaflet, tells all the average lay person needs to know about the disease, lists the common symptoms and urges early examination.

*Cancer Control, Some Questions and Answers*, a bulletin for teachers and pupils, was prepared to answer actual questions. It gives late information on cancer and contains a bibliography of books, pamphlets, bulletins and periodical materials for lay persons.

*Cancer in Michigan* is a statistical bulletin on the incidence of cancer, and cancer deaths in the state.

These are available from the local health departments or the Michigan Department of Health, Lansing 4, Michigan, in quantities.

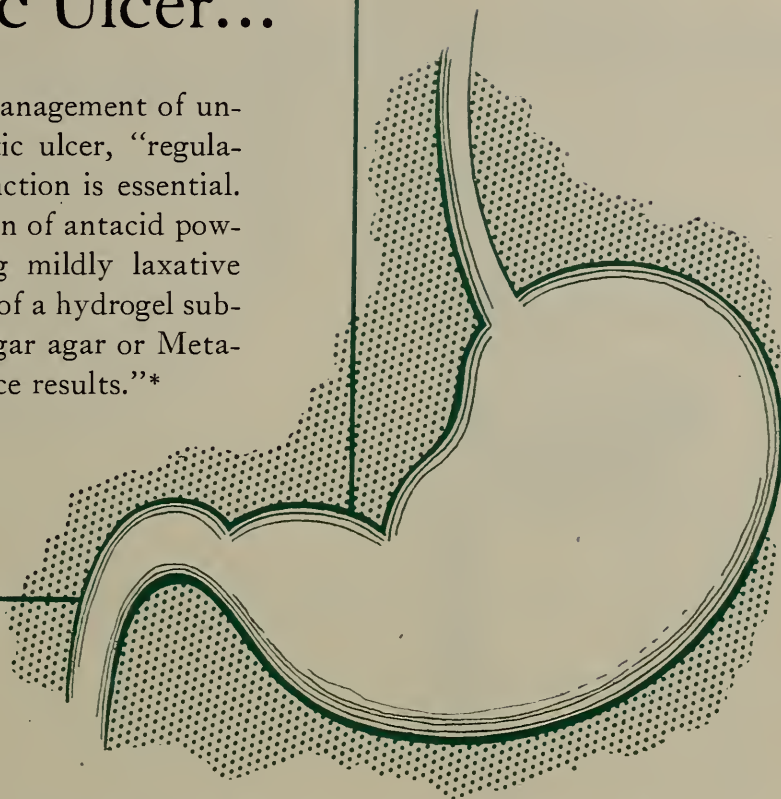
## BRANCH, HILLSDALE FORM DISTRICT

Branch and Hillsdale Counties now have a district health department.

The boards of supervisors of the two counties took  
(Continued on Page 386)

# Bowel Regulation in Peptic Ulcer...

In the medical management of uncomplicated peptic ulcer, "regulation of bowel function is essential. . . . A combination of antacid powders . . . having mildly laxative effects or the use of a hydrogel substance, such as agar agar or Metamucil, will produce results."\*



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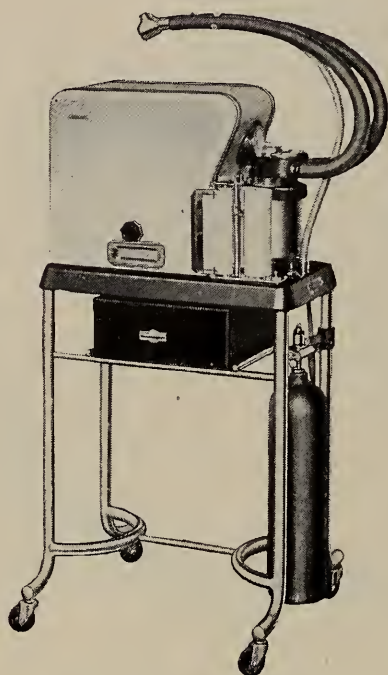
\*Gerendasy, J.: Modern Treatment of Peptic Ulcer, J. M. Soc. New Jersey 43:84 (March) 1946.



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## BRANCH, HILLSDALE FORM DISTRICT

(Continued from Page 384)

necessary legal steps to combine the two county health departments into a district department effective January 1, 1949.

There are now ten city health departments and forty-four county and district health departments in the state.

## POWERS LABORATORY HAS ANNIVERSARY

Established January 18, 1939, to provide more rapid diagnostic service in the control of communicable disease to physicians and health officers in the southern and eastern areas of the Upper Peninsula, the Powers Branch of the Michigan Department of Health Bureau of Laboratories has observed its tenth anniversary.

The Branch laboratory, which received its first specimen January 20, 1939, made 65,260 examinations including communicable disease, water and milk specimens in the fiscal year, 1947-48. In addition it distributed biologics made in the Lansing Laboratories to the physicians in its area.

Marian Sprick, who has been at the laboratory since it opened, is Division Chief in Charge. John Towey, M.D., is director of Pinecrest Sanatorium in which the Powers Branch Laboratory is housed.

## INCIDENCE OF COMMUNICABLE DISEASE

Disease	January, 1949	January, 1948
Diphtheria .....	17	20
Gonorrhea .....	690	771
Lobar pneumonia .....	99	64
Measles .....	1,755	3,007
Meningococcic meningitis .....	6	4
Pertussis .....	164	482
Poliomyelitis .....	13	2
Scarlet fever .....	1,244	569
Syphilis .....	787	1,123
Tuberculosis .....	443	464
Typhoid fever .....	1	1
Undulant fever .....	10	17
Smallpox .....	0	0

## HUMAN GROWTH, EMOTIONAL NEEDS IN NEW FILMS

*Human Growth*, the popular and well recommended film on maturation and reproduction, prepared by the E. C. Brown Trust Company and the University of Oregon Medical School for early adolescent children has been added to the Film Loan Library of the Department and is available for loan.

The film demonstrates how sex education can be handled in schools, gives the classroom teacher a suitable instructional aid for presenting the biological facts of sex as a part of human growth and development, and illustrates a teacher-pupil relationship which is conducive to easy classroom discussion. It is suggested for parents, teachers and grades six to nine. It takes 18 minutes showing time. The film should be previewed

(Continued on Page 388)



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## *Has Both...*

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**DETROIT 1, MICH.**

**HUMAN GROWTH, EMOTIONAL NEEDS  
IN NEW FILMS**

*(Continued from Page 386)*

by those who intend to use it in order that pupils may have adequate preparation for it.

*Meeting Emotional Needs in Childhood*, a 33-minute sound film prepared by the New York University to show how parents and teachers may help the 7 to 10-year-old to develop desirable attitudes toward people and a sense of community responsibility as he grows older, has also been added.

Both are 16 mm. films.

**AMCP STUDYING REVISION OF  
MEMBERSHIP STANDARDS**

Revised membership requirements for Blue Shield Plans affiliated with Associated Medical Care Plans are being studied by the Membership Committee, of which A. J. Offerman, M.D., Omaha, is chairman.

Present membership requirements for plans belonging to AMCP are based upon minimum standards established by the Council on Medical Service of the AMA. The AMCP Constitution provides, however, that the Blue Shield Commission may impose further standards at any time. It is for the purpose of supplementing the Council on Medical Service standards that the Blue Shield Commission recently instructed its Membership Committee to prepare a new and considerably strengthened set of membership requirements.

Commenting on the proposed stiffening of Blue Shield standards, Dr. Paul R. Hawley, Chief Executive Officer, said, "Blue Shield is beginning to mean something in this country, and, for the security of all the plans, I think the plans should protect themselves by raising their standards of approval."

**UNUSUAL GASTROINTESTINAL DISEASES**

*(Continued from Page 362)*

who gave so generously of his time in consultation on the material presented.

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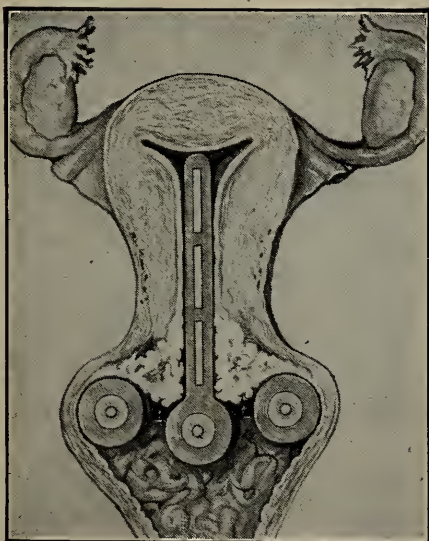
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## In Memoriam

HARRY BROWN BRITTON, M.D., of Ypsilanti, Michigan, was born on March 9, 1874, in Dayton, Ohio, and was graduated from the University of Michigan Medical School in 1897. He practiced medicine in Ypsilanti for fifty years; served in World War I, and in World War II, he was Assistant Flight Surgeon at the Willow Run Bomber Plant from June, 1942, to December, 1945. He was President of the Washtenaw County Medical Society in 1929 and was elected to Emeritus Membership in the Michigan State Medical Society in September, 1948. Dr. Britton passed on, January 7, 1949, in Ypsilanti, at the age of seventy-four years.

THOMAS JOSEPH CARNEY, M.D., of Alma, Michigan, was born August 15, 1869, in Watkins Glen, New York, and was graduated from the Long Island College of Medicine in 1898. He was a former mayor of Alma, Michigan, and was a member of the Gratiot-Isabella-Clare County Medical Society, the American Medical Association, and the Michigan State Medical Society. Dr. Carney had practiced in Alma since 1915 and died there on January 3, 1949, at the age of seventy-nine years.

EDWIN JAMES EVANS, M.D., of Ontonagon, Michigan, was born on October 19, 1871, and was graduated from the Wayne University College of Medicine in 1896. Dr. Evans was Commanding Officer of the 92nd Division Field Hospital, and Regimental Surgeon of the 365th Infantry Regiment during World War I. He was a member of the Ontonagon County Medical Society, the Michigan State Medical Society and the American Medical Association. Dr. Evans retired from active practice in 1943 and died on January 9, 1949, in Ontonagon, at the age of seventy-eight years.

GILBERT E. FRANK, M.D., of Harbor Springs, Michigan, was born on October 19, 1879, in Ontario, Canada, and was graduated from the Detroit College of Medicine in 1901. Dr. Frank was a member of the Northern Michigan Medical Society, the Michigan State Medical Society, and the American Medical Association. He retired from active practice in 1946 due to illness and passed on at the home of his brother-in-law, in St. Johns, Michigan, December 20, 1948, at the age of sixty-nine years.

PARKER BLAIR GAMBLE, M.D., of Detroit, Michigan, was born April 14, 1886, in Chattanooga, Tennessee, and was graduated from the University of Michigan Medical School in 1913. He was former head of the staff at the Dunbar (Parkside) Hospital. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, and American Medical Association.

(Continued on Page 392)

# SABEL'S CLUB FOOT SHOE

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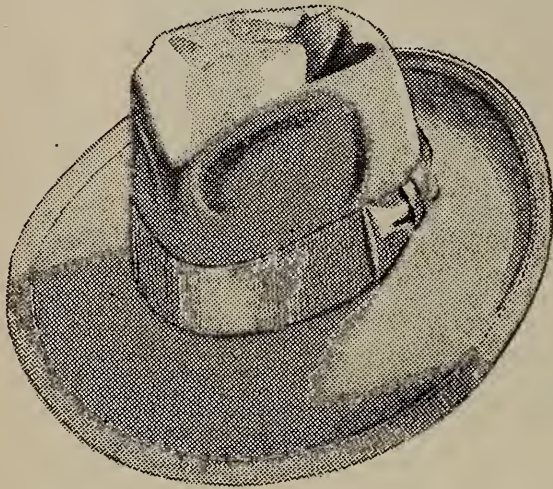
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(Continued from Page 390)

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tion. He was also a member of the Iota Boule and Alpha Phi Alpha fraternities. Dr. Gamble died in Detroit, December 27, 1948, at the age of sixty-two years.

HENRY HULST, M.D., of Grand Rapids, Michigan, was born on June 25, 1859, in Friesland Province, The Netherlands, and was graduated from the University of Michigan Medical School in 1888. He was a former President of the American Roentgen Ray Association and a member of the Kent County Medical Society, the Michigan State Medical Society, and American Medical Association. Dr. Hulst came to the United States in 1874 and after graduation from medical school worked at the Traverse City State Hospital. After this work he studied hypnotism, as used in medical practice, in Paris, France. He was one of the pioneers in x-ray work in this country. Dr. Hulst died on January 2, 1949, in Grand Rapids, at the age of eighty-nine years.

BERTHA LOVELAND SELMON, M.D., of Battle Creek, Michigan, was born on December 15, 1877, in Columbus Grove, Ohio, and was graduated from Battle Creek College in 1898 and the American Medical Missionary College in 1902. Dr. Selmon and her husband, also a doctor of medicine, practiced for twenty-two years in China, prior to returning to Battle Creek. She was President of the Michigan Branch of the American Medical Women's Association from 1934 to 1936; was a Life member of the Calhoun County Medical Society and of the Michigan State Medical Society and a member of the American Medical Association. Dr. Selmon died on January 25, 1949, in Battle Creek, at the age of seventy-one years.

HAROLD KOCH SHAWAN, M.D., of Detroit, Michigan, was born January 9, 1884, in Mt. Vernon, Ohio, and was graduated from Western Reserve University School of Medicine in 1909. He was Professor of Surgery at Wayne University for seventeen years and was on the staffs of Grace, Deaconess, St. Francis and Receiving Hospitals. Dr. Shawan was a member of the Wayne County Medical Society, the Michigan State Medical Society, and the American Medical Association. He died suddenly in his office in Detroit on January 11, 1949, at the age of sixty-five years.

## AUREOMYCIN IN DENDRITIC KERATITIS

(Continued from Page 352)

5. Ross, Sidney; Schoenbach, Emanuel B.; Burke, Frederic G.; Bryer, Morton S.; Rice, E. Clarence, and Washington, John A.: Aureomycin therapy of Rocky Mountain spotted fever. J.A.M.A., 138:1213, (Dec. 25) 1948.
6. Spink, Wesley W.; Brande, Abraham, I.; Castaneda, M. Ruiz, and Goytia, Roberto Sylva: Aureomycin therapy in human brucellosis. J.A.M.A., 138:1145, (Dec. 18) 1948.
7. Wright, Louis T.; Sanders, Murray, Logan, Myra A.; Prigot, Aaron, and Hill, Lyndon M.: Aureomycin, a new antibiotic with virucidal properties. J.A.M.A., 138:408, (Oct. 9) 1948.



## The Mary E. Pogue School

Complete facilities for training Retarded and Epileptic children educationally and socially. Pupils per teacher strictly limited. Excellent educational, physical and occupational therapy programs.

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### A SOUND DIAGNOSIS

With the professional calm expected of them, Michigan doctors have offered an antidote to feverish plans for a huge medical bureaucracy.

They offer a sound plan under which every individual will be able to obtain hospital and medical care.

Instead of a huge, socialistic health program proposed by government planners the medics suggest expansion of existing facilities, the Blue Cross and the Blue Shield, for universal medical protection.

The difference is like that between a spectacular and radical operation, through which the patient may not live, and quiet, intelligent treatment to restore the patient to health.

The Michigan Medical and Michigan Hospital services, known respectively as the Blue Shield and Blue Cross, now provide a budget plan, similar to insurance, to pay for medical treatment.

The doctors propose machinery to include every one under them. Those dependent upon government for treatment would be cared for by government contribution to the agencies as the progressive Veterans Administration now treats ex-service men through the medical service.

Under the doctors' plan, the cost of medical treatment would be the whole cost—bureaucracy cost would not exist.

The doctor and his patient would still be individuals—and the bureaucrat would not be there to meddle.

The doctors' diagnosis of the national health problem is sound; government would do well to follow the prescribed treatment.—*Detroit Times*, January 13, 1949.

### CLOUDS ARE GATHERING

The important fact is that the practice of medicine and the care of the sick have reached in the United States the highest level any country has ever seen. We may be sure continued effort along the same lines will bring ever greater improvement.

But there is trouble on the horizon. Politicians, at the instance of Marxist schemers, have long had their eye on this whole business of the care of the sick. Great Britain has politicalized her medicine, which means simply that political bureaucrats have stepped in, and from now on will tell doctors, dentists, nurses, and patients what to do to the very last detail.

And the same political move threatens here and now in the United States. It will rise to full height during the coming session of Congress. A supreme effort is to be made to convert our magnificent system of caring for the sick into a Government-run machine of political medicine.

The fate of 160,000 doctors is at stake. But, more important still, is the stake of the 148,000,000 people to whom they minister.

If you, Mr. and Mrs. America, are willing to let Government bureaucrats tell you just how your sick and injured are to be cared for, then pay no attention to this letter. But if you are not willing, now is the time to do something about it.

It may shock many to be told that the incomparable fabric of American medicine has enemies, and that these enemies wish first to destroy it, and then replace it by something else under their own control.—MERWIN K. HART, President, National Economic Council, Inc.

In Lansing

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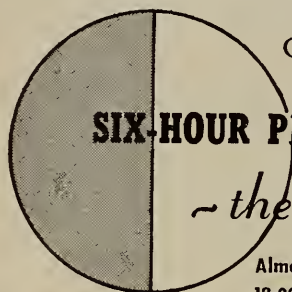
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**Communications**

**AN OPEN LETTER TO THE MICHIGAN  
STATE MEDICAL SOCIETY**

January 31, 1949

Editors of "The Journal"  
Michigan State Medical Society  
610 Post Building  
Battle Creek, Michigan  
Gentlemen:

Your reference to the Better Business Bureau in a recent editorial indicates the need for a brief review of the Bureau's campaign to expose the rebate or "kick-back" racket in the sale of eyeglasses and to put the brakes on those oculists, optometrists or opticians who have tried to keep right on exploiting the pocketbooks of the eyeglass buying public.

It was just a year ago that "The Journal of the American Medical Association" published its forthright and forceful editorial condemning "barter and trade in the sick patient"; complimenting Better Business Bureaus, notably Los Angeles', for exposing the "kickback" evil; and urging every state and county medical society in the country to take steps toward ridding the medical profession of these profiteering "parasites."

On the heels of the Detroit Bureau's disclosure that optical supply houses here were charging referral patients as high as \$12 for eyeglass frames wholesaling at \$2.75, with the difference kicked back secretly as a commission to many prescribing doctors, The Detroit Ophthalmological Society on March 11, resolved to individually and collectively *discontinue the rebate system* and on March 29, the Council of the Wayne County Medical Society went on record as believing the *entire system of hidden compensation should be discontinued*.

Subsequent Bureau investigation disclosed continued price gouging by certain doctors who collected the padded prices in their own offices instead of having it done for them at the optical supply house—thus obviating any need for month-end "kickback" checks. Following exposure of this persistent exploitation of the public, the Council of the Wayne County Medical Society went on record as disapproving rebates, kickbacks or resale for profit of any commodity used in rendering medical service as unethical.

The Council's constructive stand on this profit question was favorably publicized in the metropolitan press and Detroiters are today able to buy glasses at substantial reduction from the padded prices which prevailed a year ago. This isn't just an opinion, but has been disclosed by a Bureau survey completed within the past ten days. This survey also showed that there is still a startling variation in the prices being charged on identical glasses and frames by the various doctors' offices, optical supply houses and retail outlets checked . . . and that alert comparative shopping, which the Bureau has been urging the eyeglass buying public to do in its own protection, pays.

It was particularly interesting to note that while your recent editorial attempts to defend the continued merchandising of glasses by the eye doctor—"for the well-being and satisfaction of his patient"—we found one of your most vocal advocates of "merchandising" collected \$15 for the eye examination of our shopper and then asked \$18 for a pair of single vision plastic frame glasses which wholesale for \$6 complete.

Based upon its firsthand experience, shopping and consumer complaints, the Bureau applauds the uncompromising stand the Council of the Wayne County Medical Society took publicly last September and herewith urges your state group to follow the nationally significant lead set by the Wayne County Society and its "non-profit"

(Continued on Page 396)





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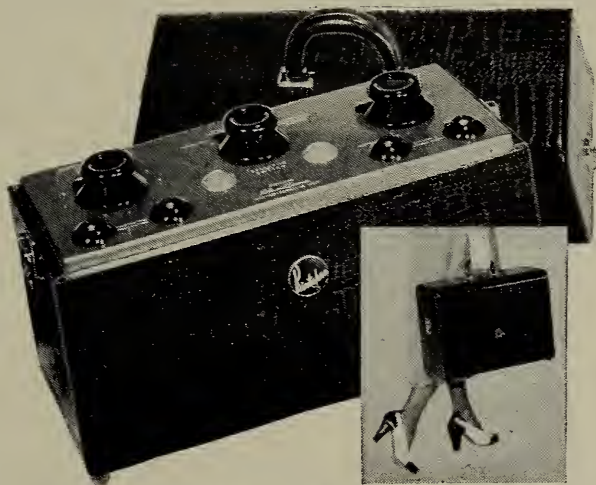
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Surgical Anatomy and Clinical Surgery, two weeks, starting March 21, April 18, May 16.  
Surgery of Colon and Rectum, one week, starting March 7, April 11.  
Esophageal Surgery, one week, starting June 13.  
Thoracic Surgery, one week, starting June 20.  
Breast and Thyroid Surgery, one week, starting June 27.
- GYNECOLOGY**—Intensive Course, two weeks, starting March 21, April 18, June 20.  
Vaginal Approach to Pelvic Surgery, one week, starting April 4, May 16.
- OBSTETRICS**—Intensive Course, two weeks, starting March 7, April 4.
- MEDICINE**—Intensive Course, two weeks, starting April 4.  
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- DERMATOLOGY**—Formal Course, two weeks, starting May 2.
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(Continued from Page 394)

members and get a similarly constructive program under way in the other cities of Michigan in which no such protective steps have as yet been taken in the public interest.

Sincerely yours,  
BETTER BUSINESS BUREAU  
of Detroit, Inc.

H. I. McELDOWNYNE  
General Manager

cc: Wayne County Medical Society  
American Medical Association  
Los Angeles Better Business Bureau  
Association of Better Business Bureaus

February 3, 1949

Mr. McEldowney, Manager  
Better Business Bureau of Detroit  
819 Transportation Building  
Detroit 26, Michigan  
Dear Sir:

I have just received your open letter to the Michigan State Medical Society about the "Rebate Racket" in the sale of eyeglasses and at the same time find the release in the *Detroit Free Press* making some of the facts of this letter public.

We have nothing to conceal. You have certainly misinterpreted the editorial comments of our JOURNAL which have definitely and for years opposed the rebate plan. Within the year, we published the complete Code of Ethics of the American Medical Association to cover this subject and we published the excerpts from the Law of the State of Michigan prohibiting rebates.

If the proper diagnosis of the eye cases and, incidentally the fitting of glasses, were a purely commercial proposition, we would advocate that the doctors of medicine get out of the glasses business; but we know so well that the examination leading up to the proper fitting of glasses frequently uncovers eye diseases which cannot be diagnosed by others than well-trained oculists and in those cases the administering of glasses is the same as administering a dose of digitalis or a hypodermic of adrenalin in acute asthma. If we were not allowed to give the digitalis or the adrenalin as a professional service but give it as a commercial transaction, I wonder where the practice of medicine would lead.

I presume, though you did not say so, that you would like to have us publish your letter in THE JOURNAL and we have no objections to doing so, but we consider that you have already forestalled us by publishing in the public press.

Very sincerely,  
WILFRID HAUGHEY

February 11, 1949

Dr. Wilfrid Haughey, Editor  
The Journal, MSMS  
610 Post Building  
Battle Creek, Michigan  
Dear Sir:

This will acknowledge your recent reply to our "Open Letter" addressed to the editors of THE JOURNAL.

I do not believe that we misinterpreted your editorial, which lauds the House of Delegates of your State Society for opposing—the word used in the editorial is "superseding"—the constructive action of the Council of the Wayne County Medical Society in disapproving resale for profit of eyeglasses or any other commodity used in rendering medical service as unethical. Any such advocacy of "merchandising" by eye doctors, with its patent profit angle, is not only adverse to the thinking of the Wayne County Society and the Better Business Bureau

(Continued on Page 398)





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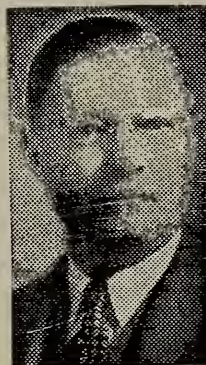
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E. F. Schmitt, Sec'y-Treas.



(Continued from Page 396)



## HOW TO APPLY A BETTER SCALP PATCH

(1) Squeeze a small amount of Sta-Fast Cohesive on edge of gauze dressing and press to the scalp. Bandages thus applied remain firmly in place—eliminate unsightly, bulky head wrappings, tape and ties. Provide greater patient comfort—better appearance.

(2) Spread a thin coating of Sta-Fast Cohesive over the surface of the scalp patch. Sta-Fast quickly forms a transparent protective film impervious to water, dirt, oil and chemicals. Patches stay clean longer, require less frequent dressing, are neat, comfortable, easy to apply. Save bandaging time and effort. Try Sta-Fast Cohesive. Available through leading Surgical Supply Dealers or write for free sample.

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The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

but of the eyeglass buying public whose affliction should assuredly be free from exploitation.

Whether or not you see fit to publish the Bureau's "Open Letter" in the Journal, we wish to stress our conviction that protective steps in the public interest already taken in Detroit are overdue in the other Michigan cities in which your State Society has members.

Sincerely yours,

**BETTER BUSINESS BUREAU**  
of Detroit, Inc.

H. I. McELDOWNEY,  
General Manager

cc: Wayne County Medical Society

**EDITOR'S NOTE:** THE JOURNAL has repeatedly condemned the practice of kickbacks or rebates as a review of our various editorials will prove. We did, however, report the action of the House of Delegates of the Michigan State Medical Society last September in the editorial referred to in the December, 1948, issue, page 1384. Unfortunately, a copy of the resolution which we used had been handed us by one of the delegates, and we did not have available the resolution as finally passed by the House in which the word "proper" was inserted in the seventh line, making the final clause "accept the responsibility involved in the proper merchandising of glasses to their patients."

The whole paragraph will, therefore, read:

"It is the consensus of this House of Delegates that the ophthalmologist's responsibility for glasses as a therapeutic agent is a medical problem not to be separated from the eye examination," and "we urge that the ophthalmologists keep within their management the supervision of optical problems, and accept the responsibility involved in the proper merchandising of glasses to their patients."

We do not believe this is a sanctioning of accepting rebates. We do believe that it is an approval by the House of Delegates of the Michigan State Medical Society of an important part of the work of the ophthalmologist; that is, the complete service in caring for eyes which may, as proper treatment, require glasses. This involves a service to the patient over and above the mere testing of the eyes and writing a prescription, and in many cases this service is essential to the content and satisfaction of the patient. We are in no way approving kickbacks or rebates, but there is a service in the proper management of glasses which the doctor may render and for which he is entitled to a profit.

Mr. C. E. Wilson, President  
General Motors Corporation  
Detroit, Michigan

Dear Mr. Wilson:

The Council of the Michigan State Medical Society, in Annual Session on January 28-29, 1949, heard the report of your very worthwhile meeting of January 26, to organize the Michigan Heart Association.

The Council instructed that a vote of sincere thanks be extended to you and be spread upon the minutes for the fine work you have done in furthering the cause of



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the Michigan Heart Association and particularly the work of Michigan's Rheumatic Fever Control Program.

It gives me great pleasure and satisfaction to assure you that you have the gratitude of the Michigan State Medical Society and its 5,000 members. An appropriate acknowledgment of your activities will be published in *THE JOURNAL* of the Michigan State Medical Society, for all to see.

We are grateful for your great help.

Very respectfully yours,  
(Signed) L. FERNALD FOSTER  
*Secretary*

February 10, 1949.

\* \* \*

Dr. L. Fernald Foster, Secretary  
Michigan State Medical Society  
2020 Olds' Tower  
Lansing 8, Michigan

Dear Dr. Foster:

I have your letter of February 10, and appreciate the kind expression of the Michigan State Medical Society.

I am confident that the continuing efforts of all of us who are interested in this program will produce results not only gratifying to ourselves but vastly beneficial to our fellow men.

Kindest regards.

Sincerely,  
(Signed) C. E. WILSON

February 11, 1949

MARCH, 1949

*Say you saw it in the Journal of the Michigan State Medical Society*

## Antibiotics

Large supply of all of the antibiotics in our stock for immediate shipment.

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## NEWS MEDICAL

*The Legislatures* of Arkansas, Nebraska, and Tennessee have memorialized Congress to vote against socialized medicine.

\* \* \*

*The Wagner-Murray-Dingell Bill* has nothing to do with health. It is pure politics.—*American Medicine and the Political Scene*, January 13, 1949.

\* \* \*

R. J. Hubbell, M.D., of Kalamazoo, Councilor MSMS, addressed the Allegan County Medical Society on February 1. His subject was "Public Relations Begins in the Doctor's Office."

\* \* \*

President E. F. Sladek, M.D., Traverse City, addressed the Grand Traverse-Leelanau-Benzie Medical Society and its Woman's Auxiliary, February 1, on "Socialized Medicine."

\* \* \*

Arch Walls, M.D., Detroit, addressed the Bay County Medical Society at its meeting of January 26. His subject was "Medical Public Relations and the 'Grass Roots' Approach."

\* \* \*

B. H. Van Leuven, M.D., Traverse City, has been appointed by The Council to serve as Chairman of the Medical Section of the Michigan Rehabilitation Association.

\* \* \*

J. Earl McIntyre, M.D., Lansing, Secretary of the Michigan State Board of Registration in Medicine, addressed the Annual Congress on Medical Education and Licensure in Chicago on February 8. His subject was "The Licensing of Hospital Resident Physicians."

\* \* \*

Total tax collections by Federal, State, and local governments represented an average of \$344.46 for each of 144,000,000 Americans for the fiscal year ended June 30, 1947. State and local governments each collected roughly one-eighth of the total, with three-fourths going to the Federal treasury.

\* \* \*

With the approval of *Arizona Blue Shield Medical Service* and the *Illinois Plan*, the number of voluntary prepayment medical care plans accepted by the AMA has grown to sixty-six. With a first quarter increase of 902,408 new members, membership in Blue Cross hospital service plans has passed the 30 million mark.

\* \* \*

Two hundred sixty thousand, one hundred and twenty-three beneficiaries of the United Mine Workers Welfare and Retirement Fund received sixty-eight million dollars

**HAVE YOU PAID YOUR 1949 MEDICAL SOCIETY DUES?** These are payable on or before April 1, 1949.

Doctor, this is your Society and it needs your support.

in benefits up to January 1, 1949, covering a period of twenty months since the fund was launched by UMW. This is the first all-inclusive report submitted.

\* \* \*

Members of the *Advisory Committee* to the Michigan Medical Assistants Society, appointed by The MSMS Council, are E. A. Osius, M.D., Detroit, Chairman; W. D. Barrett, M.D., Detroit; W. E. Barstow, M.D., St. Louis; William Bromme, M.D., Detroit and C. A. Payne, M.D., Grand Rapids.

\* \* \*

"Beginning Costs" in Germany (to finance its socialized medicine bill) began with collection of \$13.77 per insured member in 1885, but by 1929 the tax collection amounted to \$99.24 per capita. Despite this great expenditure, Germany's fight against disease lagged behind that of the United States"—EDWARD WIMMER, in *Christian Science Monitor*, Dec. 18, 1948.

\* \* \*

Hugo Aach, M.D., Kalamazoo, a member of the MSMS Public Relations Committee, spoke to the Allegan County Medical Society on February 1. His subject was "The CAP Program of the Michigan State Medical Society." He also spoke to the Plainwell Rotary Club on February 3 and to the nurses at Bronson Methodist Hospital on February 2.

\* \* \*

Ted Malone, the Westinghouse Story Teller for ABC, gave his Good American award on February 16 to T. E. DeGurse, M.D., Marine City, whom he characterized "as a person who has devoted his life to things above and beyond the call of duty."

Congratulations, Dr. DeGurse. Thanks, Ted Malone, for honoring our confrère who merits this orchid.

\* \* \*

Laboratory specimens, sent to the Michigan Department of Health, should be prepaid as follows. Individual containers—slides, 2c; swabs, 4c; small vials 8c., 4c; and glass jars 1 oz., 6c.

Bulk shipments require checking with your postoffice for rates on all shipments weighing one-half pound or over.

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Wayne University Graduate School, Detroit, recently instituted a new program leading to the degree of Master of Science in Ophthalmology, according to Dr. John J. Lee, Dean. It is intended for doctors wishing to specialize in care and treatment of the eye and is offered through the facilities of the Wayne University College of Medicine.

\* \* \*

G. L. Waldbott, M.D., J. J. Shea, M.D., and M. M. Harrington, M.A., of Detroit published an article in the *Annals of Allergy* (September-October, 1948 issue), entitled "Adequate Diets in Advanced Chronic Asthma."

R. Glenn Smith, M.D., and Darrell A. Campbell, M.D., of Eloise, published an article in *Surgery* (October, 1948), entitled "Some Technical Considerations in the Arteriographic Examination of the Lower Extremity."

\* \* \*

"Medical education in Germany has fallen to low estate, due mainly to lack of good instructors and overcrowding of the schools. There are 450 students in the first year at Würzburg, with sixteen students to one cadaver in dissection and four students for one microscope." (Part of report by Richard A. Kearn, M.D., (Temple University), as result of inspection tour of army, general, and station hospitals in Germany and Europe)—Washington Report on the Medical Sciences, January 17, 1949.

\* \* \*

"Since the British National Health Service started, Surrey, England, druggists have dispensed more than

half a million doctors' prescriptions for medicine and pills. This is about two and a quarter times as many as in the same period last year.

"Under this Act one doctor's prescriptions during a week included, 'corsets, coal, hot water bottles, outside shoes, vacuum flasks, brassieres, milk, elastic stockings, petrol, eggs, whiskey, paraffin, and brandy.'"—The American College of Radiology Monthly News Letter, January, 1949.

\* \* \*

L. Fernald Foster, M.D., of Bay City, MSMS Secretary, has appeared recently before numerous groups and societies to explain the MSMS CAP Program and the work of the Mediation Committees. He spoke to the Oakland County Medical Society on January 20; Bay County Medical Society on January 26; Calhoun County Medical Society, February 1; Tuscola County Medical Society, February 10; Kalamazoo Academy of Medicine, February 15; Saginaw County Medical Society, February 22; Charlotte Rotary Club, March 1; Jackson County Medical Society, March 15; Wayne County Medical Society Auxiliary, April 8 and Bay City P.T.A., March 2.

\* \* \*

Wm. J. Burns, MSMS Executive Director, spoke to the Michigan Society of Professional Engineers in Lansing on February 21; his subject was "The Benefits of Membership in a Professional Organization."

"Work to Build Attendance," was the subject of the lead feature article in the magazine *Convention and*



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*Trade Shows* of January, 1949, written by Mr. Burns, which outlined the years of study, planning and promotion behind the 765 per cent increase in MSMS Annual Session attendance accomplished by the Michigan medical profession in thirteen years.

\* \* \*

VA Administrator Carl R. Gray, Jr., promised that hospital retrenchment will result in reduction of service to neither service-connected or non-service-connected patients. The savings of \$279,000,000 would be effected according to the present budget by cancelling plans for twenty-four new hospitals and reducing the size of fourteen others. Most of them are in the south and middle west and Congressmen are already raising a rumpus over the impending slash. There will be no interference with the thirty-one VA hospitals which are under construction. The Hawley Board report calls for decommissioning of two Army General Hospitals and one Navy General Hospital; reduction of three general Army hospitals to station status, and forty-eight Army station hospitals to dispensaries.—Washington Report on the Medical Sciences, January 17, 1949.

\* \* \*

Gen. Dwight D. Eisenhower warned that the nation might fall under the dictatorship of a bureaucratic government unless it steeled itself against a readiness to accept paternalistic measures.

Eisenhower now is on leave as president of Columbia University to serve temporarily as presiding officer of the Joint Chiefs of Staff.

He addressed student leaders from many states at a Columbia forum on democracy.

"The kind of dictatorship under which we may fall today is not that brought off by some individuals of history through coups d'etat and a suddenly seized power, and with Army and Navy or some other kind of method, or through guns, or to put us all in straitjackets," Eisenhower said.

"There is a kind of dictatorship that can come through a creeping paralysis of thought, a readiness to accept paternalistic measures from the government and, along with those paternalistic measures, a surrender of our own responsibilities and, therefore, a surrender of our own thought over our own lives and our own right to exercise our vote dictating the policies of this country."

Discussing the results of a shift toward centralized bureaucracy, Eisenhower said:

"There will be a swarming of bureaucrats over the land.

"Ownership of property will gradually drift into that central government, and finally, you have to have a dictatorship as the only means of operating such a huge organization."—*Detroit Free Press*, February 14, 1949.

\* \* \*

Thirteen thousand dollars a bed is the estimate for some rural hospitals or additions contemplated in Michigan under the Hospital Survey and Construction Program. However, when bids actually were opened on projects, one small hospital ran over \$20,000 a bed,



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although this figure was reduced to about \$17,400 by stripping the building. Whereas the estimate on cubic costs had been about \$1.35, bids came in from \$1.40 for a 72-bed addition on St. Joseph's Hospital in Menominee (beds only) to \$1.87 for a small new general hospital in Manistique.

At the present time, contracts have been let on only two projects in which the federal government is assisting with Hill-Burton funds. These are the Holland Hospital and the addition of the St. Joseph Hospital in Menominee. Two other projects on which bids have been opened and for which insufficient funds are available are Manistique and Rogers City. Other applications which have been received and which presumably receive assistance out of one of the first three years' allocations are: Iron Mountain, Manistee, Greenville, Hancock, St. Joseph, Benton Harbor, Dearborn-Western Wayne, Three Rivers, Hastings, Traverse City, Frankfort, and Albion.

\* \* \*

J. S. DeTar, M.D., of Milan, Speaker, MSMS House of Delegates, addressed the National Rural Health Conference on February 5 in Chicago. His talk, entitled, "A State Rural Health Committee in Action," was broadcast over WGN, Chicago, and the Mutual Network. Dr. DeTar also was invited to address the Oregon State Medical Association's Secretaries Conference in Portland on February 20; he spoke on "The Michigan CAP Plan."

On January 11 he visited the "20 Club," Ypsilanti, and spoke on "Uncle Sam, M.D." On January 20 he spoke at Christ Church, Cranbrook, on the subject "Uncle Sam, M.D.," and on the same day addressed the Oakland County Medical Society with an "Analysis of the Ewing Report." On January 26, during Farmers' Week in Lansing, he spoke on "Community Health Needs from the Doctor's Viewpoint." On February 14 he spoke to the Beyer Hospital Auxiliary, Ypsilanti, on "The Answer of the Medical Profession to the Socializers." On February 15 he addressed the Staff of St. Joseph's Hospital, Ann Arbor, with his "Analysis of the Ewing Report," and on February 17 he attended the meeting of the Monroe County Medical Society and spoke on "The Public Education Program of the AMA." He returned to Beyer Hospital, Ypsilanti, February 24, and addressed the Nurses Staff on "The Threat of National Socialism."

March 1 found Dr. DeTar addressing the Jackson Women's Club on "Uncle Sam, M.D." and also at the St. Joseph County Medical Society meeting in Sturgis, where he spoke on the subject "American Medicine's Progressive Program." March 15 he addressed the Rotary Club in his home town of Milan on the topic "Socialization; Shall We, or Shall We Not?" Also on this day he addressed the Kalamazoo Academy of Medicine with his "Analysis of the Ewing Report." On March 23 Dr. DeTar addressed the Wayne County Medical Auxiliary in Detroit concerning "Specific Answers to the Arguments for Socialization of Medicine; A Plan of Action for the Auxiliary."





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**THE DOCTOR'S LIBRARY**

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review as expedient.*

**CIBA ILLUSTRATIONS OF ANATOMY AND PATHOLOGY**  
By Frank H. Netter, M.D., Summit, N. J.: The Ciba Pharmaceutical Products, Inc., 1949.

Issued in book form are the Ciba illustrations of anatomy and pathology which were prepared by Frank H. Netter, M.D. These full color drawings have been distributed to physicians for the last several years in portfolio form by Ciba Pharmaceutical Products, Inc., Summit, N. J.

These anatomical charts have been widely acclaimed in the medical profession. In many medical schools they are used as teaching aids and physicians have found them valuable in office instruction of patients.

While portfolios of new drawings will be issued from time to time, this new book brings together those that were distributed up to January 1, 1948.

The book measures 9½ x 12½ inches and contains 224 pages, showing 191 of these anatomical charts printed in full color. It is being sold by Ciba at a price to cover only the actual printing and binding costs.

The subjects covered in the book are as follows:

*Color Plates*

The Lungs and Chest .....	36
Injuries to the Chest .....	12
The Esophagus .....	12
The Stomach .....	19
The Duodenum .....	12
The Small Intestine .....	20
The Colon .....	20
Injuries of the Abdomen .....	10
The Testicle .....	14
The Prostate .....	5
The Male Breast .....	2
The Female Breast .....	18
The Heart and Aorta .....	11

The illustrations are printed on 80-pound gloss enamel paper and the book is bound in boards with blue buckram covering, with the title stamped in genuine gold on the front and spine.

**MANUAL OF PUBLIC HEALTH HYGIENE.** By J. R. Currie, M.A. (Oxon.), M.D., LL.D. (Glas.), D.P.H. (Birm.), F.R.C.P. (Edin.), Professor-Emeritus of Public Health, University of Glasgow, County Medical Officer of Buteshire and Medical Officer of the Royal Burgh of Rothsay, sometime County Medical Officer of Fifehire and Kinross, Medical Officer Scottish Board of Health. Professor of Preventive Medicine Kingston, Ontario, and Medical Officer of the City of Chester. And A. G. Mearns, M.D., B.Sc. (Public Health), D.P.H. (Glas.), F.R.S. (Edin.) Senior Lecturer and Examiner in Hygiene in the University of Glasgow. Medical Adviser, Scottish Council for Health Education. Specialist Clinical Officer, Corporation of Glasgow. Third edition, with 212 illustrations and four plates in color. Baltimore: The Williams and Wilkins Co., 1948.

This is a British text on hygiene and public health, rewritten since the war and incorporating much new material, the outgrowth of war experiences. Aircraft regulations are dealt with extensively. New chapters have been added on Health Education and Medical Climate.



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tology. Discussion of Social Medicine covers the Poor Law, Medical Practice, Unemployment, Orthopedics, National Health Service and Care of the Aged. Sections are included on School and Mental Hygiene, Industrial Hygiene, Statistics, Food, Ventilation, Water Supply and Disposal, Community Diseases and Infestations. The book is one of the most complete we have seen and will be of great value to the practitioner as well as the student.

**ANESTHESIA: PRINCIPLES AND PRACTICE.** A Presentation for the Nursing Profession. By Alice M. Hunt. New York: G. P. Putnam's Sons, 1949. Price, \$2.60.

Miss Hunt, surgical anesthetist for twenty-five years in the Surgical Department of Yale University Medical School, speaks from much experience in her book written primarily for the information of nurse anesthetists. She tells of the history of anesthesia, discusses the physiology and the anesthetic drugs. She tells of general anesthesia, local and regional anesthesia; premedication, its advantages and disadvantages; care of the patient, preoperative and postoperative. Preparation of the patient and administering the anesthesia are outlined. Various anesthetic agents, volatile liquids, gases, intravenous or spinal drugs are considered, including the adjuncts avertin, evipal, and pentothal sodium. Obstetric anesthesia gets a chapter. This book is not a detailed text, but a convenient and handy outline for the guidance of the anesthetist.

**SURGERY OF THE HAND.** By Sterling Bunnell, M.D., Honorary member of American Academy of Orthopedic Surgeons; Member of American Surgical Association, American Association of Plastic Surgeons, American Society of Plastic and Reconstructive Surgery, American Association for the Surgery of Trauma and American Society for Surgery of the Hand; Consultant in Hand Surgery to the Surgeon General, Licentiate of American Board of General Surgery and Plastic Surgery, Corresponding Member of British Orthopedic Association. Second Edition. Philadelphia: J. B. Lippincott Co. Price \$16.00.

Dr. Bunnell has given us a second edition of his masterful book "The Surgery of the Hand." This volume shows that he has profited by experience in the observation of 20,000 hand injuries during military service. The volume, if possible, is more extensive and more authoritative than his original book. He has considered the hand as an entity and has made every effort to preserve its useful functions. His illustrations, of which there are 779, are magnificent and his text greatly detailed. Industrial surgeons or orthopedic men in general will find this book a "must"—not in their libraries, but on their reference or reading tables.

### WORTH READING

1. "The Case Against Socialized Medicine" by Lawrence Sullivan (Statesman Press, National Press Bldg., Washington 4, D. C.).
2. "How to Pay the Doctor" in *Woman's Home Companion*, March, 1949, page 4.
3. "Good Medicine Doesn't Mean Socialism" in *Collier's* of March 5, 1949, page 78.
4. "California Calls the Doctor" in *Collier's* of February 26, page 56.
5. "A Crusader," editorial in *Detroit Free Press* of March 15, 1949.



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**OPENING FOR MEDICAL DIRECTOR** of Sunshine Sanatorium. Complete surgical, medical and clinical tuberculosis program. Well qualified physician with state license required. Salary adequate. Write: John K. Burch, President, Board of Trustees, 217 Division Avenue, S., Grand Rapids, Michigan.

**AVAILABLE APRIL 1, 1949**—One accepted rotating residency. One accepted rotating internship available July 1, 1949. 213-bed Massachusetts Hospital. Definite teaching program with salary and maintenance. Grade "A" graduate only. Reply Box No. 2, 2020 Olds Tower Building, Lansing 8, Michigan.

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# You and Your Business

## HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 16, 1949

- Monthly financial reports and bills payable were presented, studied and approved. Treasurer A. S. Brunk, M.D., Detroit, reported he plans to submit authenticated ratings of MSMS bonds to The Council in January and July annually.
- Report of Legislative Committee studied; telegram was authorized to be forwarded to Michigan Congressmen urging the establishment of a separate Department of Health headed by an administrator of cabinet rank who is a doctor of medicine.
- Proposed amendments to Afflicted-Crippled Children Acts, to be proposed to the Legislature by the Michigan Hospital Association, were presented to the Executive Committee. The Executive Director presented the recent revisions of the Crippled Children Commission fee schedules, promulgated December 2, 1948.
- The Public Relations Committee meeting of January 8 minutes were approved, as was the monthly progress report of Public Relations Counsel H. W. Brenneman.
- Report on the AMA-Whitaker-Baxter Plan of Public Relations, as outlined in Chicago on February 12, was presented by Secretary Foster.
- The Executive Committee of The Counsel recommended to Whitaker and Baxter, AMA Public Relations Counsel, that they send copies of the DeTar Analysis of the Ewing Report to Chambers of Commerce, Service Clubs, et cetera, and if this cannot be done by Whitaker and Baxter, that the MSMS is to assume this effort.
- The Special Committee on Increase in Number of Medical Students (Drs. E. F. Sladek, J. S. DeTar, and L. F. Foster) was requested to meet with Governor G. Mennen Williams at the earliest possible date to discuss possibility of increase in appropriations to Michigan's two medical schools, to aid in swelling the number of freshmen students.
- Appointment of the Committee on Arrangements for the 1950 Michigan Postgraduate Clinical

Institute was referred to President-elect W. E. Barstow, M.D.

- Report was given that approximately 3,600 Michigan doctors are serving patients in the Michigan Medical Service program. The Secretary was instructed to include in his Secretary's Letter a paragraph inviting all MSMS members to lend encouragement to this voluntary health program by service to MMS subscribers.
- The monthly reports of the President, President-Elect, Secretary, Editor, and General Counsel were received and the various items acted upon.
- Dr. Foster, as Secretary of the Michigan Heart Association, reported that the MHA had been incorporated in Michigan as a non-profit organization on February 17, 1949.
- Committee reports were accepted from Special Committee on Immunization, the Special Committee on Education, and the Cancer Control Committee.

### DISTRIBUTION OF HOSPITALS— SURVEY OF 1937

1. There are 6,128 hospitals in the United States.
2. In each of 2,133 counties, there is at least one recognized hospital.
3. There are 560 additional counties entirely within a radius of 30 miles of hospitals in neighboring counties.
4. There are 368 counties lying in part within, and in part without, a circle of a 30-mile radius surrounding existing hospital facilities.
5. There are thirteen counties no part of which is within 30 miles of a hospital. The population of these counties is 67,800.
6. The population of the 368 counties (item 4) is 3,657,469. Assuming that this population is on the average half within and half without the 30-mile radius, the portion of the population which is more than 30 miles from a hospital is 1,828,735. Adding to this the 67,800 in the thirteen counties no part of which is within 30 miles of a hospital, we have 1,896,535, which is 1.5 per cent of the total population of the United States, living more than 30 miles from a recognized hospital.—AMA Survey, 1937.

(Continued on Page 420)

# MR. BRUNCHER IS A DONUT-MUNCHER

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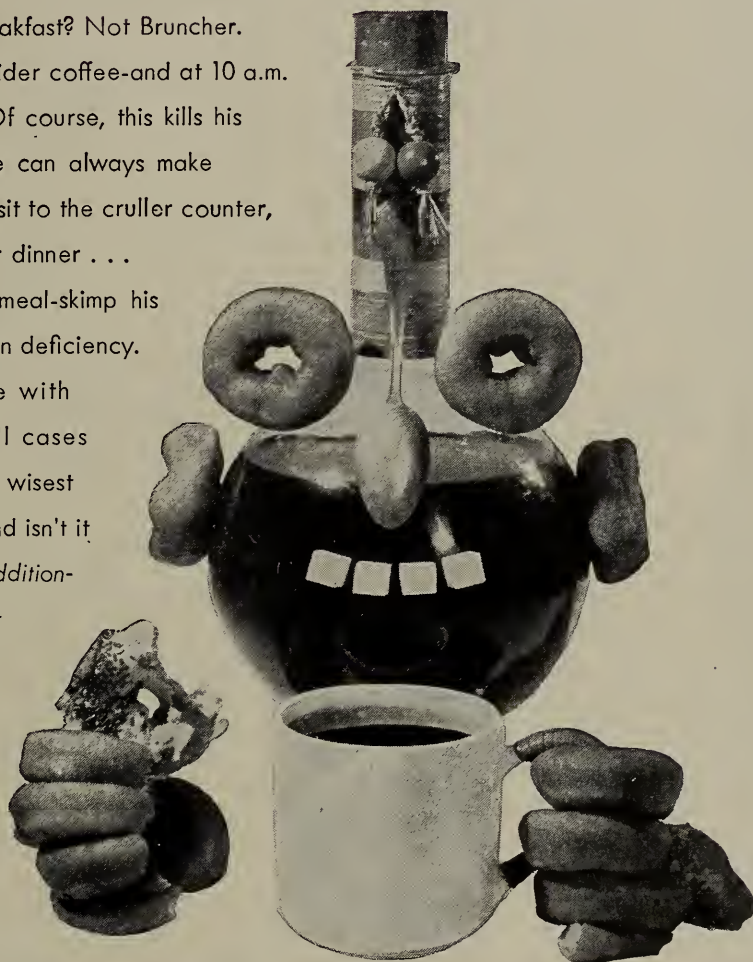
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(Continued from Page 418)

# AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The general oral and pathology examinations (Part II) for all candidates will be conducted at Chicago, Illinois, by the entire Board from Sunday, May 8, through Saturday, May 14, 1949. The Hotel Shoreland in Chicago will be the headquarters for the Board. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates. Hotel reservations may be made by writing direct to the Shoreland.

Candidates for re-examination in Part II must make written application to the Secretary's office not later than April 1, 1949.

Candidates in military or Naval Service are requested to keep the Secretary's office informed of any change in address.

Applications are now being received for the 1950 examinations. Application forms and Bulletins are sent upon request made to: American Board of Obstetrics and Gynecology, Inc. 1015 Highland Building, Pittsburg 6, Pennsylvania.

## WEST SIDE MEDICAL SOCIETY

### Sixteenth Annual Clinic

Wednesday, May 4, 1949, 10 a.m. to 4 p.m.  
Auditorium, Wayne County General Hospital,  
Eloise, Michigan

#### Program

##### Morning Session

- 10:10—C. E. UMPHREY, M.D., Detroit, Member of Council Michigan State Medical Society. "Reactions to new Legislation proposed by Medicine, Labor and Federal Security."
- 10:30—EDWARD J. McCORMICK, M.D., Toledo, Member Board of Trustees, American Medical Association. "Can the American Doctor Save Private enterprise?"
- 11:15—BRADLEY M. PATTEN, Ph.D., Professor of Anatomy, University of Michigan Medical School, Ann Arbor. "Micromoving Picture Records of the first beats of the Embryonic Heart."
- 12:00—Intermission for luncheon.

P.M.

##### Afternoon Session

- 1:00—F. WILLIAM SUNDERMAN, M.D., Director of Clinical Laboratories, Cleveland Clinic, Cleveland. "Electrolytes in Health and Disease."
- 1:45—PHILIP THOREK, M.D., Surgeon, Chicago. "Intestinal Obstruction."
- 2:30—T. L. POOL, M.D., Urologist, Mayo Clinic, Rochester, Minnesota. "Tuberculosis of the Urinary Tract."
- 3:15—WALTER S. PRIEST, M.D., Cardiologist, Chicago. "Management of Patients with Coronary Artery Disease."

There is no registration fee. All members of the Michigan State Medical Society are cordially invited to attend.

## GENESEE COUNTY MEDICAL SOCIETY AND FLINT REGIONAL COMMITTEE ON FRAC- TURES AND OTHER TRAUMAS

Fifth Annual Fracture and Other Traumas Program  
Wednesday, May 18, 1949

Merliss Brown Auditorium—Hurley Hospital  
Flint, Michigan

- 1:30—Registration for scientific program and sale of tickets for subscription dinner.
- 1:50—Address of Welcome—HAROLD HISCOCK, M.D., President, Genesee County Medical Society.

#### Afternoon Program

- Presiding—GEORGE J. CURRY, M.D., Chief of Section for Surgery of Trauma, Hurley Hospital.
- 2:00—"Practical Applications of the Basic Sciences to the Surgery of Trauma"—RICHARD L. RAPPORT, M.D.
- 2:15—"Transportation of the Injured"—HAROLD WUGHTER, M.D.
- 2:30—"Receiving and First Aid Procedures"—HARDIE B. ELLIOTT, M.D.
- 2:45—"Time Factors in Fracture Management"—DONALD L. BISHOP, M.D.
- 3:00—"Thoracic Trauma"—STEPHEN M. GELENGER, M.D.
- 3:15—"Abdominal Trauma"—EDWIN P. VARY, M.D.
- 3:30—*Recess for Viewing Exhibits.*
- 3:45—"Open Fractures"—DONALD R. BRASIE, M.D.
- 4:00—"Early Recognition of Urological Injuries"—ALVIN M. THOMPSON, M.D.
- 4:15—"Fractures in Children with Consideration of Seasonal Variations"—HIRA E. BRANCH, M.D.
- 4:30—"Hip Fractures"—MAX R. DODDS, M.D.
- 4:45—Discussion Period.

#### Evening Program

- 6:00—Social Hour, Durant Hotel.
- 7:00—Dinner—Guest Speaker, MR. STEPHEN J. ROTH, Attorney General for the State of Michigan: "The General Practitioner and His Medico-Legal Responsibilities."

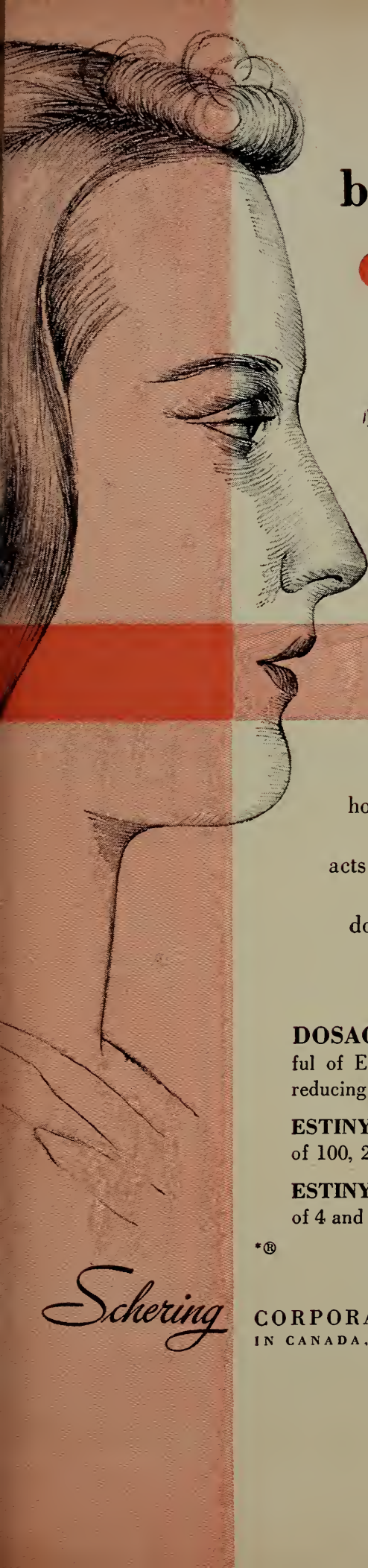
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# Michigan Health Council Active

A. S. Brunk, M.D., Detroit, President of the Michigan Health Council, announced the appointment on February 18, 1949, of Eugene H. Wiard as Executive Secretary. The activities of the Council are being expanded from new offices which have been set up at 706 N. Washington Avenue in Lansing.

Mr. Wiard comes to the Council with an extensive background in business management and executive experience. Formerly he managed the Central Michigan office of the Retail Credit Company, with personnel and field activities throughout eighteen Central Michigan counties. He was graduated from Ohio State University in 1929, after which he came to Michigan where he has since resided, moving to Lansing from Detroit in 1943.

The Michigan Health Council has planned an aggressive program for expanding activities and aiding and co-ordinating the efforts of the various health groups in establishing health councils at the county level. Efforts of the Council will be directed also toward a general educational program aimed at taking all necessary and practical steps to increase the availability of health services in rural areas. The Council will try to provide a

common meeting ground on which representatives of all groups interested in health throughout the state can meet to discuss mutual problems.

For the past two years the Michigan Health Council has assisted in the planning of the Michigan Rural Health Conference, and at present is working with the co-sponsors of that organization on details for the 1949 Conference. A meeting of the Committee on Arrangements of the Michigan Rural Health Conference was held in Lansing on March 3. A meeting of all co-sponsors was arranged in Lansing on March 14. At the latter session the co-sponsors elected E. I. Carr, M.D., Lansing, as Chairman of the 1949 Michigan Rural Health Conference and voted to hold it in Grand Rapids on October 28-29, 1949.

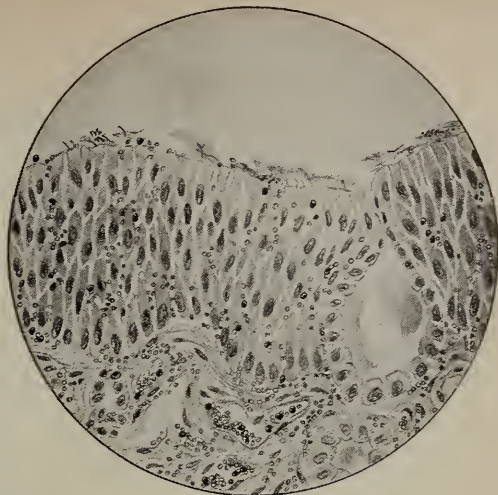
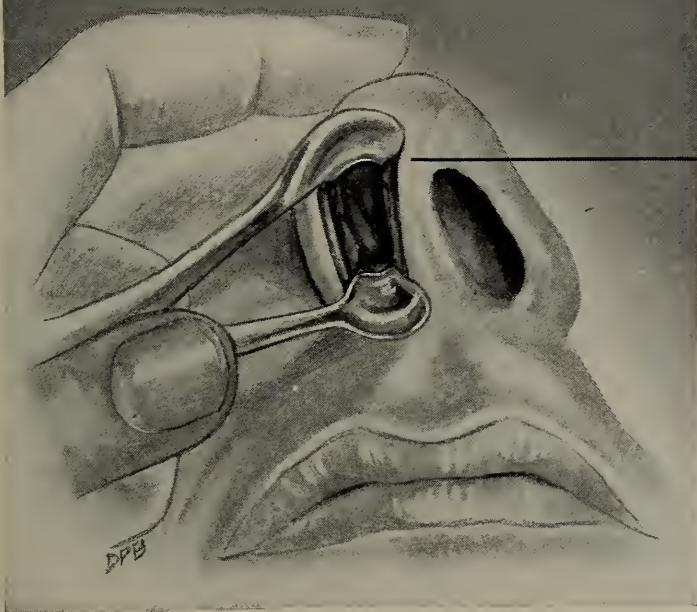
Dr. Brunk explained that a formal announcement of the program of expanded activities of the Council, including a complete background and the projected program, will go out shortly to co-sponsors, prospective members, and all Michigan organizations interested in health activities, and will be followed by an invitation to such organizations to join in the augmented statewide program.

## SOME BENEFITS OF MEMBERSHIP—MSMS

- | Professional  | — | Educational | — | Economic | — | Sociologic |
|---|---|-------------|---|----------|---|------------|
| 1. Enjoyment of a position of trust and social responsibility in the community resulting in the opportunity to assume leadership in all medical matters.  |   |             |   |          |   |            |
| 2. Safeguarding your common interests through the vigilant work of democratically selected officers and committeemen who are men of your own kind: (a) who know your problems and those of your patients; (b) who serve generously without compensation; (c) who need and ask for your co-operation and advice. |   |             |   |          |   |            |
| 3. Maintenance and constant improvement of standards of medical practice for the protection of patients.  |   |             |   |          |   |            |
| 4. Protection against state and national legislation inimical to public interest and the advancement of medical science; constructive efforts to initiate beneficial health measures; important contacts to effect the proper administration of existing laws.  |   |             |   |          |   |            |
| 5. Information and technical advice in medical-legal matters.   |   |             |   |          |   |            |
| 6. Opportunity to participate actively in planning, organizing and operating public service health programs sponsored by your medical societies (such as voluntary service plans, rheumatic fever control centers, et cetera).  |   |             |   |          |   |            |
| 7. Authentic information to an inquiring public regarding good medical service and the standing of practitioners.   |   |             |   |          |   |            |
| 8. Publication of a monthly Journal of high quality containing the latest scientific literature as well as medico-economic information important to you.  |   |             |   |          |   |            |
| 9. Opportunity to participate in an active public relations program designed and working in the interests of the public, your profession and yourself.  |   |             |   |          |   |            |
| 10. Personal service of your Executive Office in Lansing in matters associated with your practice of medicine.  |   |             |   |          |   |            |
| 11. Your medical societies act as sales ambassadors of the medical profession in your community and in the state.   |   |             |   |          |   |            |

The returns you receive from membership in the Michigan State Medical Society are almost unlimited. Your destiny is intimately related to the success of your county, state and national medical organizations.

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in colds  
. . . sinusitis



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Normal appearing nasal epithelium.



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# Michigan Medical Service

## MICHIGAN MEDICAL SERVICE ISSUES NEW CERTIFICATES

Since March 1, 1949, a new form of certificate for subscribers to Michigan Medical Service has been in effect. The new forms are as follows:

Surgical Benefit Certificate—GS-3-49—Revision of March 1, 1949. Medical-Surgical Benefit Certificate—GMS-3-49—Revision of March 1, 1949. Community Enrollment Surgical Benefit Certificate—CES-3-49—Revision of March 1, 1949.

These three new certificates replace all certificates previously in force. The general format of the certificates has been changed considerably, but the substance remains the same with the following major changes of interest to doctors:

### Definitions and Benefits

*"Maternity services; i.e., services for any condition due to pregnancy except ectopic pregnancy, but not until after the certificate has been in force nine (9) consecutive months immediately preceding date of delivery. Maternity services do not include pre-natal or post-natal care."*

Emergency surgical first aid in doctor's office previously was a liberalization. This condition has now been made a part of the out-patient services and is in the contract reading as follows:

*"Emergency first aid in the doctor's office. The maximum benefit for such service shall not exceed \$15.00."*

This in no way changes the payment for surgical services in the doctor's office where the item is listed in the fee schedule at \$20.00 or more.

*General Limitation.*—Further exclusions are: (a) indirect blood transfusions, (b) sterilization of either sex, regardless of medical necessity, (c) x-rays classified as screening, miniature plate or stereos.

*Exception to Full Service.*—In addition to Sections (a) and (b) which cover the conditions regarding subscriber income and private room accommodation requirements, a new section has been added:

*"(c) In the case of a subscriber not within classes (a) and (b) of this section who shall be*

*entitled to recover damages by reason of, or reimbursement for, the cost of the services or for the injury, accident or condition occasioning the services, except from insurers on policies of insurance issued to and in the name of such subscriber, the payment made to the doctor of medicine by Michigan Medical Service shall be considered to be on account of the reasonable value of the services, and the difference between such reasonable value and the amount received by the doctor from Michigan Medical Service shall be a liability of the subscriber to the doctor, payable out of such damages or reimbursement if, as and when recovered by the subscriber.*

*"Such additional charge, if any, shall be the liability of the subscriber and not of Michigan Medical Service."*

## HOSPITAL SERVICE RATES CHANGED

Michigan Medical Service subscription rates to Subscribers have not changed, but Michigan Hospital Service, its companion Plan, had a serious loss from operations during the first six months of 1948. During that last six months, it reduced its deficit but it appears that there will be a net deficit for the year of somewhat more than \$200,000.

Hospital costs continue to rise all over the State. Furthermore, utilization by subscribers continues at a high level. Effective March 1, 1949, Michigan Hospital Service increased its subscription rates to Group and Direct Pay subscribers. The new monthly *Group* rates are as follows:

	Hospital Only		Hosp. Surg.		Hosp. Surg.-Med.	
	Ward Semi-Pri.		Ward Semi-Pri.		Ward Semi-Pri.	
Single Subscriber	\$1.80	\$2.10	\$2.40 to \$2.70 to	\$2.70*	\$2.70 to \$3.00 to	\$3.15*
Husband & Wife	\$4.10	\$4.60	\$5.70	\$6.20	\$6.30	\$6.80
Full Family†	\$4.10	\$4.60	\$6.35	\$6.85	\$7.35	\$7.85

\*—Dependent on per cent of females in the group

†—Includes Husband, Wife and All Eligible Children

The Direct Pay rates are slightly higher than the above. There is no increase in rates to subscribers under the Community Enrollment or Limited Service (\$5.00 and \$7.00) contracts at this time.

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# MSMS County Secretaries---Public Relations Conference

January 9, 1949



H. M. BEST

H. M. Best, M.D. of Lapeer, long-time Secretary of the Lapeer County Medical Society, was chosen as Chairman of County Society Secretaries at the Annual Conference held at the Book-Cadillac Hotel, Detroit, on Sunday, January 9.

One hundred ninety-seven were in attendance and heard an intensely enlightening program presided over by E. W. Blanchard, M. D., Deckerville, who served as chairman during the past year.

J. S. DeTar, M.D., Milan, was the opening speaker on the day's very interesting program. His subject was "The Present National Crisis" in which he presented for the first time his Analysis of the Ewing Report which has since become a popular brochure throughout the nation.

"Nationalization of Medicine" was discussed by Warren H. Cole, M.D., of Chicago.

C. E. Umphrey, M.D., Detroit, spoke during the afternoon on "America's Health Planning Avoids Compulsion"; and Hugh W. Brenneman, MSMS Public Relations Counsel, presented "Michigan's Progressive Voluntary Health Program."

Ample time was given both in the morning and in the afternoon for audience participation.

The January 9 conference was the opening gun in Michigan's well-known CAP plan of action against medicine dominated by politics.

The forty-three county and district secretaries and executive secretaries present at the Conference were:

*County Secretaries.*—J. E. Mahan, M.D., Allegan (Allegan); Harold Kessler, M.D., Alpena (Alpena-Alcona-Presque Isle); L. Fernald Foster, M.D., Bay City (Bay-Arenac-Iosco); R. C. Conybeare, M.D., Benton Harbor (Berrien); H. R. Bodine, M.D., Battle Creek (Calhoun); U. M. Adams, M.D., Marcellus (Cass); Bruno Cook, M.D., Westphalia (Clinton); Robert E. Ryde, M.D., Gladstone (Delta-Schoolcraft); Charles Steinke, M.D., Iron Mountain (Dickinson-Iron); E. P. Griffin, M.D., Flint (Genesee); Kuno Hammerburg, M.D., Clare (Graftiot-Isabella-Clare); Carle A. Peterson, M.D., Hillsdale (Hillsdale); P. J. Murphy, M.D., Calmuet (Houghton-Baraga-Keweenaw); G. D. Cummings, M.D., Lansing (Ingham); Robert E. Rice, M.D., Greenville (Ionia-

Montcalm); H. W. Porter, M.D., Jackson (Jackson); G. H. Riggerink, M.D., Kalamazoo (Kalamazoo); J. R. Brink, M.D., Grand Rapids (Kent); Wm. Hewes, M.D., Adrian (Lenawee); Ray M. Duffy, M.D., Pinckney (Livingston); D. B. Wiley, M.D., Utica (Macomb); John F. Konopa, M.D., Manistee (Manistee); A. S. Narotzky, M.D., Ishpeming (Marquette-Alger); Robert R. Scott, M.D., Scottville (Mason); John A. White, M.D., Big Rapids (Mecosta-Osceola-Lake); Stanley A. Stealy, M.D., Grayling (Medical Society of North Central Counties); H. R. Brukart, M.D., Menominee (Menominee); H. L. Gordon, M.D., Midland (Midland); W. M. LeFevre, M.D., Muskegon (Muskegon); H. R. Moore, M.D., Newaygo (Newaygo); L. E. Grate, M.D., Charlevoix (Northern Michigan); O. R. MacKenzie, M.D., Walled Lake (Oakland); C. H. Flint, M.D., Hart (Oceana); W. F. Strong, M.D., Ontonagon (Ontonagon); J. H. Kitchel, M.D., Grand Haven (Ottawa); M. J. Murray, M.D., Saginaw (Saginaw); E. W. Blanchard, M.D., Deckerville (Sanilac); W. L. Merz, M.D., Owosso (Shiawassee); E. W. Fitzgerald, M.D., Port Huron (St. Clair); G. Thomas McKean, M.D., Detroit (Wayne); G. C. Tornberg, M.D., Cadillac (Wexford).

*Executive Secretaries.*—Sara M. Burgess, Flint (Genesee); Else Kolhede, Detroit (Wayne).

Officers and Members of the Council of the Michigan State Medical Society in attendance were:

*Officers:* E. F. Sladek, M.D., Traverse City, President; W. E. Barstow, M.D., St. Louis, President-Elect; L. Fernald Foster, M.D., Bay City, Secretary; A. S. Brunk, M.D., Detroit, Treasurer; J. S. DeTar, M.D., Milan, Speaker—House of Delegates;; P. L. Ledwidge, M.D., Detroit, Immediate-Past President.

*Councillors:* C. E. Umphrey, M.D., Detroit, 1st District; Wilfrid Haughey, M.D., Battle Creek, 3rd District; R. J. Hubbell, M.D., Kalamazoo, 4th District; R. C. Pochert, M.D., Owosso, 6th District; T. E. DeGurse, M.D., Marine City, 7th District; L. C. Harvie, M.D., Saginaw, 8th District; E. A. Oakes, M.D., Manistee, 9th District; F. H. Drummond, M.D., Kawkawlin, 10th District; C. A. Paukstis, M.D., Ludington, 11th District; D. W. Myers, M.D., Ann Arbor, 14th District; O. O. Beck, M.D., Birmingham, 15th District; W. B. Harm, M.D., Detroit, 17th District; William Bromme, M.D., Detroit, 18th District.

The thirty-two Public Relations Committee representatives present were: L. W. Hull, M.D., Chairman, Wayne; Hugo Aach, M.D., Kalamazoo; G. T. Aitken, M.D., Kent; E. W. Blanchard, M.D., Sanilac; A. F. Bliesmer, M.D., Berrien; A. S. Brunk, M.D., Wayne; C. G. Clippert, M.D., North Central Counties; L. Fernald Foster, M.D., Bay; W. G. Gamble, M.D., Bay; L. T. Henderson, M.D., Wayne; F. P. Husted, M.D., Bay; Kenneth Johnson, M.D., Ingham; J. S. Lambie, M.D., Oakland; J. J. Lightbody, M.D., Wayne; J. E. Livesay, M.D., Genesee; John J. McCann, M.D., Ionia-Montcalm; O. B. McGillicuddy, M.D., Ingham; H. J. Meier, M.D., Branch; E. B. Miller, M.D., Manistee; B. T. Montgomery, M.D., Chippewa-Mackinac; E. S. Oldham, M.D., Graftiot-Isabella-Clare; C. A. Payne, M.D., Kent; L. A. Pratt, M.D., Wayne; R. F. Salot, M.D., Macomb; G. B. Saltonstall, M.D., Northern Michigan; A. E. Schiller, M.D., Wayne; R. W. Teed, M.D., Washtenaw; Arch Walls, M.D., Wayne; C. L. Weston, M.D., Shiawassee; John E. Webster, M.D., Wayne; T. P. Wickliffe,

(Continued on Page 430)

*when*

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*ilk becomes*

*a dietary dilemma*

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# PR In Practice

## Michigan CAP Program Moves Into High Gear

Several hundred members of MSMS met in the Grand Ballroom of the Book-Cadillac Hotel on Thursday night, March 24, for a CAP Booster Session. A review of the progress made throughout the state under the CAP organization plan was made.

During the meeting it was disclosed that every county society in Michigan had completed the initial phase and had passed resolutions against socializing medicine.

A report was made on the materials available for use in the program and mention was made of the increasing number of speeches being given by members of county societies.

Following the meeting, opportunity for interested members to meet with the Public Relation Field Secretaries working in different areas of the state was arranged.

## Sex Education Transcriptions Near Completion

Thirteen transcriptions have been completed in the sex education series that ultimately may be used as a means of youth guidance. The scripts were prepared by the MSMS under the direction of Robert F. Breakey, M.D., and the late Harold A. Miller, M.D., while the transcriptions were produced by the Wayne University Radio Department.

Due to the untimely death of Dr. Miller, the work of revising the records has been retarded; presently Dr. Breakey is carrying on alone. When he has finished the revisions, the series will be reviewed by the State Superintendent of Public Instruction and the Superintendent of Lansing Public Schools before being offered as a course of instruction for the Lansing Schools.

## Public Relations Field Secretaries

Six persons have been added recently to the Public Relations staff of the MSMS for the pur-

pose of working with individuals and societies as CAP programs gain momentum.

The new Field Secretaries are available for any help and assistance they can give in the implementation of public education plans in the various areas of Michigan.

The PR Secretaries and areas in which they work are as follows:

### WAYNE COUNTY

John Guy Miller  
4421 Woodward Avenue,  
Detroit, Michigan  
Telephone: Temple 1-6400

### CENTRAL MICHIGAN

Russell F. Staudacher  
2114 Olds Tower,  
Lansing, Michigan  
Telephone: 4-4429

### EASTERN MICHIGAN

Harold A. Draper  
1427½ Detroit Street,  
Flint, Michigan  
Telephone: 8-3236

### NORTHERN MICHIGAN

Harry Heffner  
Park Place Hotel,  
Traverse City, Michigan

### WESTERN MICHIGAN

Stuart Campbell  
611 G. R. Nat. Bank Bldg.  
Grand Rapids, Michigan  
Telephone: 9-4331

### WOMEN'S AUXILIARY

Miss Larita Jones  
4421 Woodward Avenue,  
Detroit, Michigan  
Telephone: Temple 1-6400

## Socialized Medicine Materials Available from MSMS

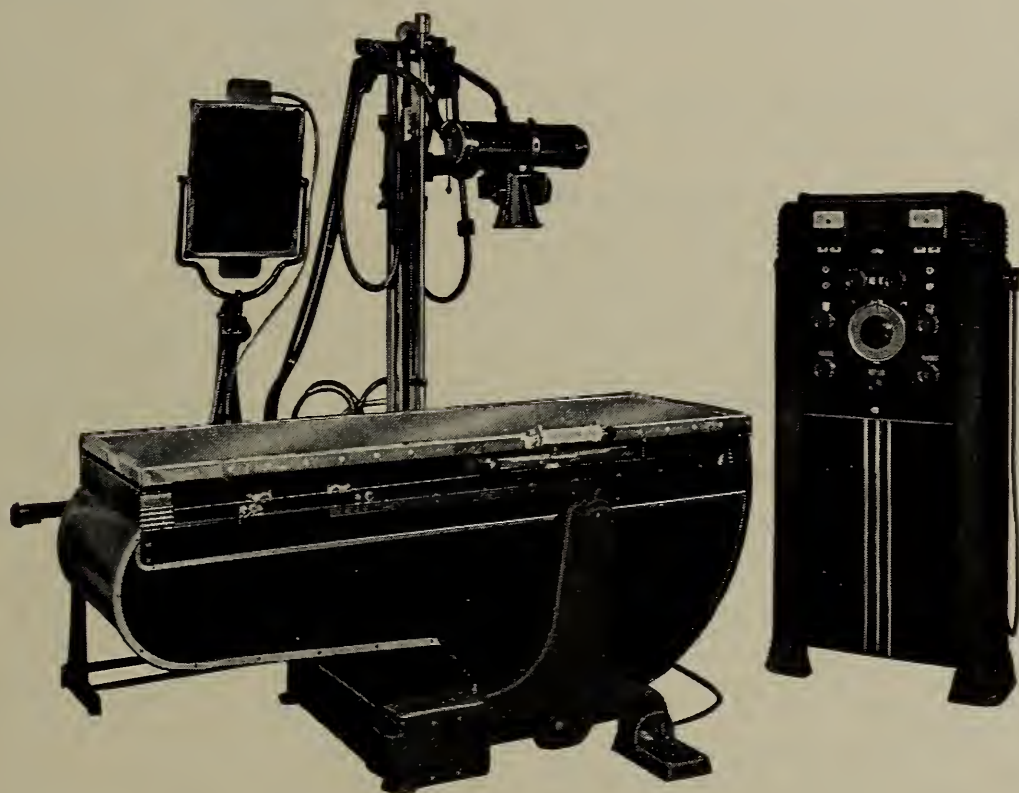
The great majority of the materials listed here are available in reasonable quantity upon requisition to the MSMS Public Relations Office, 2114 Olds Tower, Lansing 8, Michigan.

- No. 1. *Analysis of the Ewing Report*—by J. S. DeTar, M.D., Milan, Michigan.
- No. 2. *Uncle Sam, M.D.*—published by Michigan Public Expenditures Survey (Socialized Medicine as an economic threat).
- No. 3. *Check and Double Check*—published by Medical Society of New York (Questions and answers on Socialized Medicine).
- No. 4. *Brookings Institution Report Conclusions*—reprinted by National Physicians Committee (The conclusions of an unbiased survey).
- No. 5. *Doctor, My Statistics Feel Funny*—by Maurice Friedman, M.D., reprinted from the *Nation's Business* (Analysis of draft rejection figures).
- No. 6. *Socialism—A Politicians Paradise*—transcript of Radio Talk by Henry J. Taylor.
- No. 7. *A Step in the Wrong Direction*—by Dorothy Thompson (First-hand experiences in England).
- No. 8. *Digest of the Ewing Report*—published by National Physicians Committee (a Digest—not a reply or analysis).

(Continued on Page 430)



This ultra modern 200 MA two tube full wave diagnostic unit used so successfully by the Army now with rotating anode tube and therefore particularly well adapted to hospital and clinical requirements is now available for civilian institutions and physicians at our usual reasonable price. Also furnished for use in connection with our floor-ceiling rail Tube-stand and our photo fluoro-graphic 70 M.M. chest unit.



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## Socialized Medicine Materials Available from MSMS

(Continued from Page 428)

- No. 9. *American Health Planning Avoids Compulsion*—talk by C. E. Umphrey, M.D., Detroit, Michigan.
- No. 10. *The Issue of Compulsory Health Insurance*—talk by A. E. Schiller, M.D., Detroit, Michigan.
- No. 11. *Michigan's Progressive Voluntary Health Program*—talk by H. W. Brenneman, Lansing, Michigan.
- No. 12. *Porter on Health Insurance*—reprint from *Cleveland Plain Dealer*. "Health Insurance is a fine thing—will remain so until the government gets hold of it."
- No. 13. *A Brief on Compulsory Health Insurance*—reprint from *Hospital Management* (Gives fairly detailed analysis of legislation now before Congress).
- No. 14. *Political Medicine*—letter from National Economic Council, Inc. (Easy-to-read letter in matter-of-fact form).
- No. 15. *The Dr. Harris Letter*—Dr. Harris, prominent British surgeon, writes his views on British medicine to a friend in Crawfordsville, Ind.
- No. 16. *The 12 Points of the A.M.A.*
- No. 17. *Government Medicine in New Zealand*—Its social, economic and political implications as prepared by A. Lexington Jones, D.D.S., M.S., Christchurch, New Zealand.

## "Tell Me Doctor" Over New Stations

"Tell Me Doctor," the popular radio program of the MSMS, has gained new listeners during the past few weeks. Newest station to carry the five-minute program is WABJ in Adrian, Michigan.

Station WELL in Battle Creek has just announced that the programs will be carried for another year under the continued sponsorship of The Apothecary Shop in that city. The station reports that many letters from listeners testify to the wide acceptance of the recorded health news programs.

Another important change in scheduling for "Tell Me Doctor" was made in Detroit. The series is now heard over Station WJBK instead of CKLW. Doctors in Wayne County will now be able to hear their own program, as the air time is from 7:10 to 7:15 each night, Monday through Friday. The program is sponsored by the J. F. Hartz Co., Detroit.

## PUBLIC RELATIONS CONFERENCE

(Continued from Page 426)

M.D., Houghton-Baraga-Keweenaw; D. B. Wiley, M.D., Macomb.

The twenty-two Legislative Committee representatives present were: L. A. Drolett, M.D., Chairman, Ingham; W. E. Barstow, M.D., President-Elect, MSMS, Gratiot-Isabella-Clare; O. O. Beck, M.D., Chairman of The Council, Oakland; W. A. Chipman, M.D., Wayne; George Conover, M.D., Genesee; R. J. Douglas, M.D., Muskegon; E. F. Ducey, M.D., Kent; Nicola Gigante, M.D., Wayne; T. K. Gruber, M.D., Wayne; W. H. Huron, M.D., Dickinson-Iron; E. D. King, M.D., Wayne; O. B. McGillicuddy, M.D., Ingham; W. F. Mertaugh, M.D., Chippewa-Mackinac; H. L. Morris, M.D., Wayne; C. L. A. Oden, M.D., Muskegon; C. W. Reuter, M.D., Bay; E. W. Schnoor, M.D., Kent; J. G. Slevin, M.D., Wayne; R. A. Springer, M.D., St. Joseph; R. V. Walker, M.D., Wayne; George Waters, M.D., St. Clair; J. F. Whinery, M.D., Kent.

MSMS Delegates to the American Medical Association and their Alternates who attended the conference were: L. G. Christian, M.D., Ingham; W. D. Barrett, M.D., Wayne; T. K. Gruber, M.D., Wayne; W. H. Huron, M.D., Dickinson-Iron; R. A. Johnson, M.D., Wayne; R. L. Novy, M.D., Wayne.

Presidents and Presidents-elect of County Medical Societies who attended were: Walter Chase, M.D., Allegan; A. A. Humphrey, M.D., Calhoun; S. R. Russell, M.D., Clinton; Harold Hiscock, M.D., Genesee; Frank Power, M.D., Grand Traverse-Leelanau-Benzie; John F. Sander, M.D., Ingham; Ralph Wadley, M.D., Ingham; S. E. Andrews, M.D., Kalamazoo; H. C. Bodmer, M.D., Kalamazoo; J. F. Whinery, M.D., Kent; Frank L. Doran, M.D., Kent; A. M. Rothman, M.D., Macomb; James L. Gillard, M.D., Muskegon; E. B. Cudney, M.D., Oakland; W. K. Slack, M.D., Saginaw; Henry Wass, M.D., St. Clair; Donald Pollack, M.D., St. Clair; R. A. Springer, M.D., St. Joseph; Douglas Donald, M.D., Wayne; J. J. Lightbody, M.D., Wayne.

Chairmen of County Societies Public Relations Committees who attended were: F. P. Husted, M.D., Bay;

L. M. McBryde, M.D., Chippewa-Mackinac; J. E. Livesay, M.D., Genesee; E. S. Oldham, M.D., Gratiot-Isabella-Clare; T. P. Wickliffe, M.D., Houghton-Baraga-Keweenaw; Kenneth Hodges, M.D., Ingham; J. W. Rice, M.D., Jackson; Hugo Aach, M.D., Kalamazoo; P. W. Kniskern, M.D., Kent; P. T. Mulligan, M.D., Macomb; E. B. Miller, M.D., Manistee; Felix J. Kemp, M.D., Oakland; S. M. Tweedie, M.D., Sanilac; George Waters, M.D., St. Clair; Ed. Terwilliger, M.D., Van Buren; R. W. Teed, M.D., Washtenaw.

Other County Medical Society representatives included: R. J. Albi, M.D., Charlevoix; A. B. Gwinn, M.D., Barry; D. W. Thorup, M.D., Berrien; C. R. Dengler, M.D., Jackson; Wm. R. Young, M.D., Van Buren; H. P. Kooistra, M.D., Kent; H. V. Lilga, M.D., Northern Michigan; John M. Markley, M.D., Oakland; D. B. Morrison, M.D., Calhoun; A. C. Pfeifer, M.D., Genesee; G. A. Sherman, M.D., Ingham; L. J. Wallen, M.D., Chippewa-Mackinac.

Officers of the Woman's Auxiliary attending included: Mrs. T. Grover Amos, Detroit; Mrs. J. Norris Asline, Essexville; Mrs. Robert Breakey, Lansing; Mrs. Joe De Pree, Grand Rapids; Mrs. W. L. Dixon, Grand Rapids; Mrs. H. H. Gay, Midland; Mrs. Austin Heine, Mt. Clemens; Mrs. H. J. Meier, Coldwater; Mrs. Robert McGillicuddy, East Lansing; Mrs. W. W. McGregor, Detroit; Mrs. A. F. Milford, Ypsilanti; Mrs. Donald Pollack, Port Huron; Mrs. Charles Smith, Hancock; Mrs. Walter Stinson, Bay City; Mrs. Oscar Stryker, St. Clair Shores; Mrs. John Volderauer, Kalamazoo; Mrs. Don R. Wright, Flint; Mrs. Gordon Yeo, Big Rapids.

Others present were: W. H. Cole, M.D., Chicago, Illinois; Past Presidents of the MSMS, Henry Cook, M.D., Genesee, and R. S. Morrish, M.D., Genesee. Also, Mrs. W. G. Mackersie, Mr. George Cooley of the AMA, Mr. W. Byrne, Mr. J. W. Castellucci, Mr. William Cruse, Mr. L. G. Goodrich, Mr. Jay C. Ketchum, Mr. Peter Klein, Mr. W. S. McNary, Mr. Robert Morse and Mr. K. E. Trimm, representing Michigan Medical Service, Michigan Hospital Service.



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# May Is Immunization Month

Amazing progress has been made in the control of communicable diseases, particularly during the past two decades. Twenty years ago communicable diseases accounted for more than a third of the total deaths in Michigan. In 1948, less than 10 per cent of the total deaths were due to communicable diseases.

Recognizing the need for further effort, the Michigan State Medical Society and the Michigan Department of Health have designated the month of May as "Immunization Month." This month was selected since for twenty-five years May 1 has been Child Health Day. During May all physicians in Michigan are putting special emphasis on immunizing all children in their practices against whooping cough, diphtheria, smallpox and tetanus. State and local health departments, school and parent groups are carrying on intensive educational programs directed toward having all children protected.

The following basic immunization schedules are those which meet with the approval of the Michigan Department of Health and the Child Welfare Committee, MSMS:

## BASIC IMMUNIZATION SCHEDULES

Triple Vaccine	(6 mo. 7 mo. 8 mo.)
Smallpox Vaccination	1 yr.
Tuberculin Test +	2 yr.
Booster doses of triple vaccine by age 3 and at age 5. Repeat smallpox at age 5.	

OR

Pertussis	(4 mo. 5 mo. 6 mo. 7 mo.)
Diphtheria-Tetanus alum precipitated	(8 mo. 9 mo.)
Smallpox Vaccination	1 yr.
Tuberculin Test +	2 yr.
Booster doses of triple vaccine by age 3 and at age 5. Repeat smallpox at age 5.	

OR

Pertussis	(4 mo. 5 mo. 6 mo. 7 mo.)
Diphtheria alum precipitated	(8 mo. 9 mo.)
Tetanus alum precipitated	(10 mo. 11 mo.)
Smallpox Vaccination	1 yr.
Tuberculin Test +	2 yr.
Booster doses of Pertussis, Diphtheria and Tetanus by age 3 and at age 5. Repeat smallpox at age 5.	



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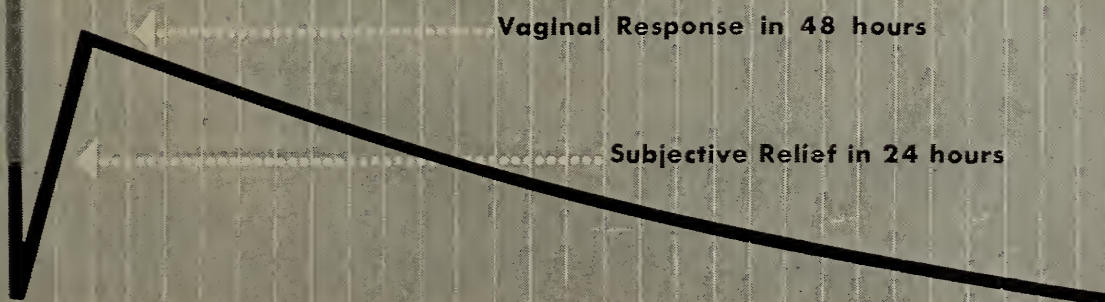
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# Socialized Medicine

## FIVE HUNDRED PHYSICIANS QUIT BRITAIN'S STATE SERVICE

The beautiful Christmassy glow that swept across Britain eight months ago when the socialist state took over most doctors and hospitals and announced that henceforth it was providing full medical service "free of charge" is beginning to fade.

Within the last few weeks more than 500 doctors have resigned from the health service and private doctors again find themselves with as many patients as before and, a survey showed, even a few more.

Patients are switching back to private doctors only at great penalty. They must continue to pay new tax assessments to support the state medicine. By quitting the government doctor, they must again pay not only the doctor but also for all medicines, glasses or other appurtenances, ambulance service and hospital care. Furthermore, the government has boosted the hospital fees for private patients by at least one third and in some cases one-half.

### Service Not Good

Patients returning to private doctors say they do so because they have found that the state is not providing good medical service and that the quality of service is already deteriorating.

"It's good enough for the ordinary day to day ailments," one patient told her private doctor. "But I can't trust it when I am really sick."

The lack of trust in the state medicine is gradually spreading. More and more doctors are saying that their patients now treat them as a clerk or a shopkeeper, a person who fills out forms for patent medicines or other benefits.

Three months ago a few doctors formed an organization called the Fellowship for Freedom in Medicine. They said the British Medical association had "lost its courage" and had been "intimidated" and, thus, had lost its value. The organization, with Lord Horder, former physician to King George V., as its head, now numbers 2,300, and more doctors are joining every day. At first the organization was made up only of doctors who refused to join the state scheme. Now more than half of its membership comes from doctors who had signed with the government but believe reforms must be made.

### Work to Reform Law

Some of the doctors wanted the organization to campaign for repeal of the medical act, branding it bad medically, ethically and politically. But the group has

decided that repeal is impossible, so will concentrate its efforts on working for reforms of the law.

The organization has already decided on two amendments it will seek: (1) To free medical schools from government control, and (2) to recover for the doctor the right to good will, which means the right to buy and sell practices, outlawed by the act.

The doctors are agreed that schools must be free from government control to assure the profession's future. They believe, likewise that doctors should recover the right to their practices so that doctors will no longer be at the mercy of government officials—that the value of a good practice will be sufficient to make a doctor independent and permit him to say "no" occasionally to some government order.

### Demand Time for Patients

The basic reforms, however, will be aimed at giving doctors adequate time to dispense good medicine. At present a doctor, to have a reasonable income, must have at least 3,000 patients. To care for such a large number of patients, many doctors devote only one, two or three minutes to the average patient.

Members of the "Freedom" fellowship do not believe a doctor can do a good job in such limited time. The obvious solution is to increase the number of doctors and also increase the pay per patient, so that a doctor can give a patient adequate time and still live well himself. But this means far greater cost than even the surprisingly high bills which government medicine has run up in the last eight months. Treasury officials are already alarmed about the high cost of state medicine, and Minister of Health Aneurin Bevan has given his first orders for cuts—the first orders going to hospitals.

### Resigners a Minority

The group is now considering some method by which doctors employed by the state can be allowed sufficient time to make adequate diagnosis and give adequate treatment.

The number of doctors resigning from the health service and of patients returning to private doctors is only a minority. The health ministry boasts that it has more doctors working for it than it did when the law became effective last July. Most of the additions, however, came in the late summer and fall and the resignations have started only lately.

More than 18,000 of the 20,000 general practitioners are working for the government, at least part time.—ARTHUR VEYSEY in *Chicago Daily Tribune* Mar. 14, 1949.



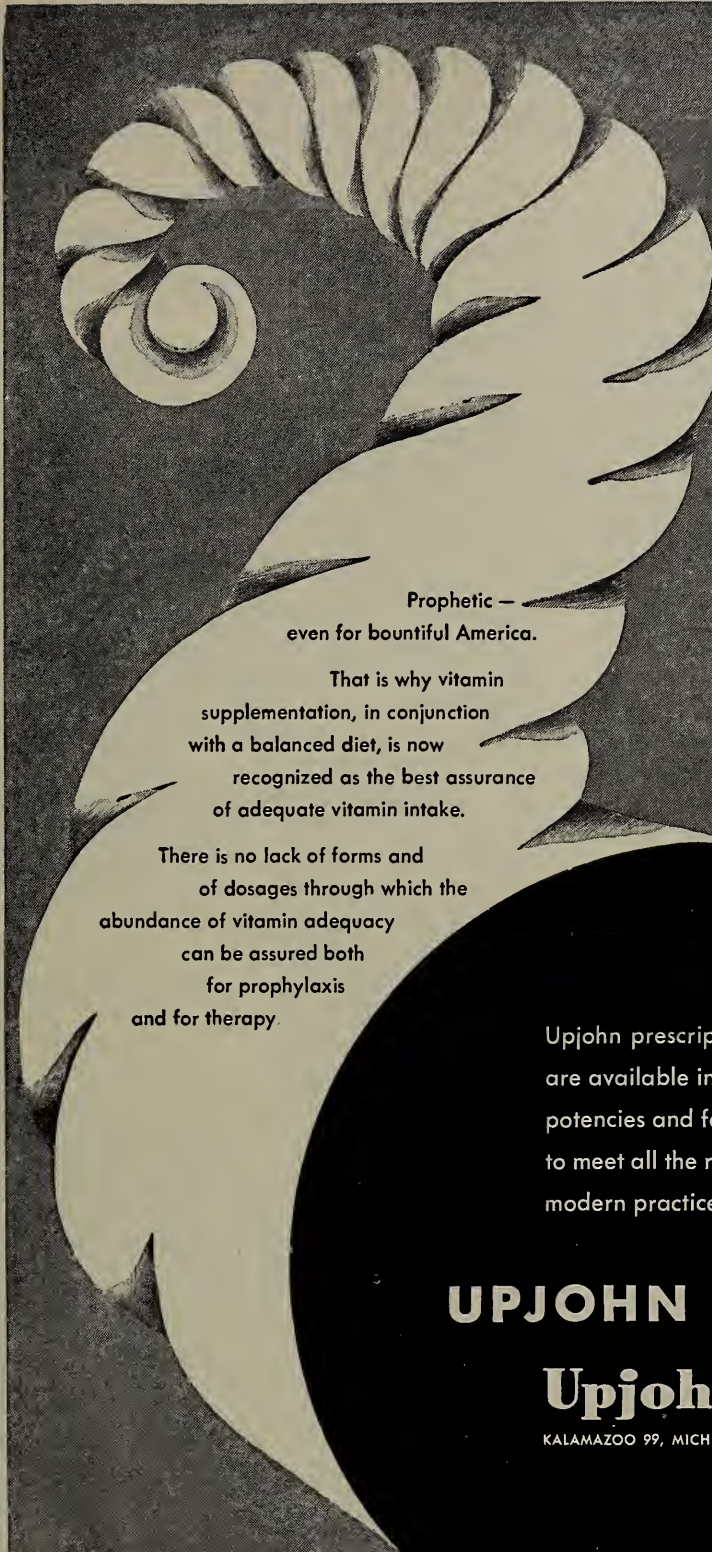
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# Political Medicine

## A JOB FOR THE DOCTORS

Senator Murray of Montana resorts to demagoguery when he accuses the American Medical Association of raising a \$3,500,000 political fund to fight his compulsory health insurance plan. He probably knows as well as the doctors do that this is a deviation from the strict truth. The doctors have assessed themselves \$25 each to raise an educational fund. Strictly speaking, there is quite a difference between public education to defeat a bill and lobbying.

The AMA is composed of most of the reputable physicians and surgeons in the United States. The family doctors of ninety-nine out of 100 of us are members. They are honorable, decent men and women, on whom most of us have complete reliance. There is nothing sinister about them. They are trying, each in his own way, to do the best job possible for the people who depend on them.

The money they are raising is to be used in telling the people, through advertisements, literature, lectures, and possibly motion pictures, just what socialized medicine would mean. The doctors as a whole, like most other people, believe that voluntary plans of health insurance are likely to be much more satisfactory than a government system, where patients are run through a mill with government doctors and government nurses looking at their tongues and handing them pills as they pass through.

Perhaps the doctors could do a better grassroots educational job than any advertising agency if each would take a few minutes a day to tell his patients the truth about socialized medicine.—Editorial, *Rocky Mountain Medical Journal*, February, 1949.

## EXCERPT FROM LINCOLN DAY ADDRESS

There is vast propaganda today for socialized medicine. I think it would destroy precious personal relationships in the American way of life, produce wholesale mediocrity in the skills which serve the sick, and saddle us with a new and appalling bureaucracy. But this does not require me to blind my eyes to the existence of a crushing and well nigh universal sick problem in the lives of millions of our citizens.

It is a problem that must be met. But we have a choice of methods. One is voluntary and, therefore, typically American. The other is involuntary and, therefore, typically bureaucratic. The latter is socialized medicine. The former is co-operative medicine. I ex-

pect the American people and the Republican Party to choose the former. I want my party to look at the great, humanitarian, co-operative effort of the Blue Cross, for example, which represents co-operation and not compulsion.

The Blue Cross comes to finest fruition here in Michigan where one of four of our people already have thus cheaper and better protection than they would ever get from socialized medicine. Probably two out of four of our Michigan people are covered by this or other voluntary plans.

I expect the Republican Party to offer co-operative legislation to encourage these voluntary plans within the States. Thus, it will liberally conserve the public welfare in the best American tradition. Thus, it will not create more problems than it solves. Thus, it will build another bridge.—THE HON. ARTHUR H. VANDENBERG, Detroit, Michigan, February 10, 1949.

## CARDIFF DOCTORS

Mr. Bevan stated on December 16, that fourteen doctors in Cardiff each had more than 4,000 registered patients. The highest number of people registered with one doctor was 7,190. This doctor practiced in a partnership employing two assistants. Seventeen Cardiff doctors had applied for the basic salary of £300.

Mr. George Thomas asked whether Mr. Bevan knew of the difficulty caused in Grangetown, Cardiff, by four doctors operating from one small surgery, having closed their other surgery when the National Health Service started, and whether, in view of the daily queue caused, he would insure that another surgery was made available.

Mr. Bevan replied that a doctor was required under the regulations to provide proper and sufficient surgery and waiting-room accommodations for his patients. This case had been considered by the Cardiff Executive Council, who had drawn the practitioners' attention to the need for full compliance with the terms of these regulations.—Editorial, *British Medical Journal*, Jan. 1, 1949.

## NOT SAFE AT HOME

Of the 638 Michigan children who were killed in accidents last year, 327—more than half—were killed in accidents in their own homes. Suffocation, home fires, and automobile-pedestrian accidents and drownings were the major causes of children's accidental deaths.



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# Military Medicine

## NEED FOR DOCTORS AND DENTISTS

Physician and dentist need is critical in the armed forces. A release from Secretary Forrestal says:

The plain fact is that the Armed Forces are faced with a shortage of physicians and dentists which, at this point, is critical.

Unless sufficient physicians and dentists come forward now and volunteer for service, our entire national defense program may be gravely handicapped.

By July of this year we will have lost almost one-third of the physicians and dentists who are now in the Armed Forces. An overwhelming majority of these are former V-12 and ASTP students whose tours of duty have been completed.

This new loss means that the Armed Forces will not have enough professional men to give necessary medical services to the almost 1,700,000 men and women who are serving their country.

We are pledged to give that service, but our Government will most certainly fail to do so unless we obtain sufficient professional manpower. Without an adequate number of qualified medical personnel we would be helpless in the event of any unusual crisis.

There are 15,000 young physicians and dentists in America today who were deferred from the draft and excused from combat in order to complete their professional education. Of this group, 8,000 received all or part of their professional training at government expense—the remaining 7,000 paid for their own education, but were excused from the draft and combat service.

By the end of July, 1949, we will be short about 1,600 physicians and about 1,160 dentists. By next

December this shortage will grow to 2,200 physicians and 1,400 dentists.

I believe these 15,000 men who saw no service overseas and who were not exposed to the rigors of war will themselves recognize our right to appeal to them to make a contribution in this emergency.

From the ranks of these men we should obtain the replacements for those who have served and who are now entitled to return to civilian life if they desire. In a democracy, this procedure is fair, equitable, and just; and we propose to make our appeal to these former ASTP and V-12 students before taking more drastic steps. As Americans, I am confident that they will recognize their obligations if they are acquainted with the facts.

It should be made clear to the various communities in America that we are not making an effort to obtain doctors from sorely needed areas, nor creating any further shortage of physicians and dentists in civilian medicine. In the next few months over 4,000 young men, trained by the Government in wartime and who now have finished their two-year tour of duty, will be returning to civilian life. We are only replacing these physicians and dentists who will be going from active duty to civilian practice.

In addition, arrangements will be made by the services to allow those who volunteer at this time to finish their current training periods before being called to active duty. Calls to active duty will be staggered so as to cause minimum disruption to civilian hospital training programs.

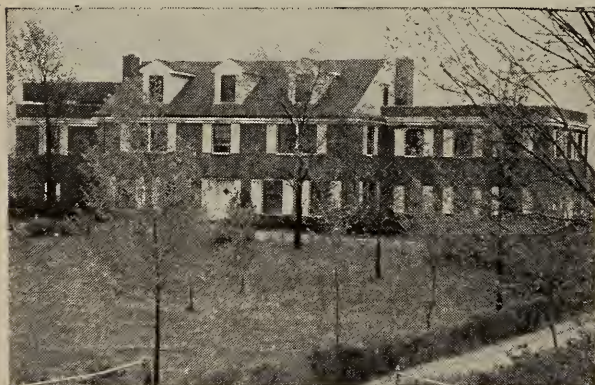
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# The JOURNAL

*of the Michigan State Medical Society*

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 48

APRIL, 1949

NUMBER 4

## Michigan Cancer Detection Center Survey

Report by the Cancer Control Committee  
Michigan State Medical Society

THE ORIGIN of the periodic medical examination for detection of early cancer is somewhat obscure. However, one of the first organized efforts in that direction was made in 1937 by Dr. Elise S. L'Esperance of New York, who organized a detection center for women at the New York Infirmary for Women and Children, later extending the program to a similar undertaking at Memorial Hospital, New York City. This program was followed a year later by Dr. Catherine Macfarlane of Philadelphia, who set up a program for examination of the breasts and uteri of 1,000 women at semi-annual intervals for a period of five years. In 1943, Dr. Augusta Webster and associates opened the Chicago Cancer Prevention Clinic at the Women and Children's Hospital. In 1944, the Donner Foundation of Philadelphia established five cancer detection centers in five teaching hospitals in that city under direction of Mildred W. S. Schram, Ph.D.

Experience gained in these pioneering undertakings demonstrated that it was possible by careful examination under certain conditions to find cancer, particularly cancer of the breast and of the cervix, before the patient had become aware of any abnormal condition in these tissues. Knowing that the greatest hope for cure of cancer is to find it in the earliest possible stage, the impetus to early diagnosis was greatly increased by the findings of these pioneering studies.

About 1945, the American Cancer Society publicized the development of similar programs

throughout the country, and at its invitation the American College of Surgeons, in 1947, promulgated and published minimum standards that such centers should meet in order to fulfill their intended purpose.

At the March, 1948, meeting of the Cancer Control Committee of the Michigan State Medical Society, a plan was approved for a study of the fifteen detection centers in Michigan, to be undertaken by two members of the committee. Accordingly, these centers were visited between August 15 and October 1, and comparable information concerning the organization and activities of each center was assembled. The remainder of this report will be devoted to a discussion of the findings of this survey.

There were advantages in having all centers visited by the same interviewers; otherwise some of the interesting problems of the sharply contrasting and confusing picture presented might have been missed. Striking differences in basic principles and mode of operation existed in different centers. The personnel of each center warmly championed its methods, although they were, in most instances, experimental.

In Michigan, the first cancer detection center was opened in November, 1945, at the Hancock School in Detroit. This center was sponsored and supported entirely by the Detroit Federation of Women's Clubs, and, as it examines only women, it was staffed by women physicians of Detroit. Other centers developed in rapid succession, until at the present time there are fifteen such centers in Michigan. Their location and date of organization are noted in Table I.

*Sponsorship.*—With one exception all of the centers are sponsored by the American Cancer Society organization in their respective communi-



# MICHIGAN CANCER DETECTION CENTER SURVEY

TABLE I. DATE OF ORGANIZATION OF CANCER  
DETECTION CENTERS IN MICHIGAN

Battle Creek	September, 1947
Detroit:	
Evangelical Deaconess Hospital	March, 1947
Federated Women's Clubs (Hancock School)	November, 1945
Harper Hospital	January, 1946
Henry Ford Hospital	January, 1946
New Grace Hospital	January, 1947
Providence Hospital	February, 1946
St. Mary's Hospital	January, 1946
Trinity Hospital	February, 1947
Woman's Hospital	January, 1946
Grand Rapids	November, 1946
Hastings-Pennock Hospital	February, 1948
Lansing	March, 1948
*Pontiac-St. Joseph's Mercy Hospital	February, 1948
Saginaw	November, 1947

\*This center has been discontinued since the survey was made.

ties. The exception is the Federation of Women's Clubs Center in Detroit. In every case the approval of the medical society of the county where the center is situated was obtained prior to organization of the program. This approval was necessary to make the program function in a worthwhile manner.

In some centers the Junior League, Farm Bureau, and similar groups actively sponsor and participate in the activities.

*Location.*—Five centers are located in quarters other than a local hospital. These are in Battle Creek, Detroit, Grand Rapids, Lansing, and Saginaw. In each of these, special quarters have been provided in a convenient downtown location and the space remodeled and equipped for the work to be done. In all other centers the work is carried on in a local hospital where quarters, and in most cases all needed equipment and supplies are made available.

*Waiting Period.*—The time in weeks between the appointment and examination varied from one to twenty-four weeks. In one Detroit center the waiting period is seventeen weeks. The other Detroit centers now have a waiting period of eight weeks. This period formerly was twenty-four weeks, but a change of policy has resulted in no new appointments being made until the backlog has been reduced to eight weeks, after which it is planned to keep the appointment list to the shorter waiting period.

Two centers had a waiting period of nine weeks, one center of six weeks, two of two weeks, and one of one week.

*Frequency of Meetings.*—In seven of the centers, there is a weekly session. In three, semi-weekly

sessions are held, while in at least three others, sessions are held daily, five days per week. The frequency of meeting in others is more irregular.

*Length of Session.*—The length of sessions varies from two to six hours. The average being from three to four hours.

*Source of Patients.*—A great majority of patients applied directly for the examination, less than 5 per cent being referred by a physician. The attempt to filter eligible examinees from those applying for examination varies. In practically all cases, applicants must select a physician prior to their examination, to whom the report of their examination will be sent. If the examinee has no physician, a list of the county medical society is submitted for a selection which, in some areas, is limited to those near the examinee's home.

In but one center are known cancer patients accepted. In two others they may be accepted if referred by a physician. It is hard to understand why an institution "detecting" cancer should dissipate its efforts by re-examining those known to have cancer unless the detection center is a part of an approved tumor clinic where complete diagnostic and treatment services are available.

Well patients are accepted in all centers, and in only a few are they restricted to any certain geographical area. In some cases they are accepted only from the county where the center is located or from an adjacent county that has no center. In others they are accepted regardless of residence.

*Number of Patients per Session.*—The number examined at each session varies from two to twenty, with an average of approximately eight.

*Number Examined per Year.*—This depends, in general, on the number and length of sessions, but in actual numbers it varies from 265 to 1,300 examinations annually, an average of approximately 580.

*Time per Examinations.*—The time devoted to each examination was given as from thirty to sixty minutes.

*Number and Percentage of Positive Findings.*—Out of 8,693 examinations in a twelve-month period, 104 cancers were found, a percentage of 1.2

positive findings in these examinations. These percentages varied from one to six in the various centers.

*Scope of the Examination.*—In all centers there was a general examination of the entire body. In addition, eleven centers made proctoscopic examinations when the history indicated. Three made no such examination. A routine proctoscopic examination is done in but one center. Five centers were utilizing the cell smear technique for early diagnosis of cervical cancer.

A urinalysis is performed at all centers but one. In but three are complete blood counts made, partial ones in two others, e.g., a hemoglobin is taken and if it is found to be low, the examinee's physician is advised that a blood count should be done. Microscopic urinalysis is not done in some centers; only the albumin and sugar reactions are performed. Kahn tests are made in but four centers. Biopsies are taken only in one center.

There is no uniformity in history-taking at time of examination. In six centers the nurse takes the history or, as in one of the centers, in co-operation with a lay secretary. In seven centers, the history is taken by a physician or, as in two centers, in co-operation with a lay secretary. In five centers a Gray Lady or other lay person takes the history, although in two of these centers the physician participates.

A carefully recorded and evaluated history is an important part of any medical examination. Unless taken by a physician, or in part by a qualified nurse, a medical history may be of little value. Forms used in the detection centers surveyed vary considerably and tend to be lengthy. When histories are taken by lay persons it would seem desirable to use a short form for basic information, leaving the recording of medical data to the examining physician.

*Disposition of Examination Record.*—Five centers advise the patient of his findings by the examining physician at the time of the examination. In ten of the centers the patient was not so advised, the report being sent to his family physician, whom he was asked to contact for further information about his condition. In four centers the examination findings were sent to osteopaths when they had been given as the physician of choice by the one examined.

There was no uniformity of disposition of examination records, and it is evident that further study of this problem is desirable.

*Follow-up Procedure.*—In ten of the centers an effort was made to keep in contact with those examined to see if they had carried out the recommendations regarding further examination by their family doctor or any other recommended procedure. Five of the centers reported that they did not follow through on their recommendations to see whether they were carried out. In practically all cases data are kept for statistical study and are available to authorized individuals.

*Participating Physicians.*—The examining staff of the center is usually drawn from members of the county medical society or hospital staff who have indicated their willingness to serve. Little difficulty has been experienced in obtaining a sufficient number for the center's needs, which vary from one to nine per session. In six centers, routine examinations are made by hospital residents, the members of the medical society being in nominal charge, with specialists acting as consultants on call. In one center consultants served once in every four or five months. In another, where the medical group is small, physicians serve every fourth session, and this frequent duty has proved somewhat of a burden.

In other centers, members of the junior attending staff make the examinations under the supervision of a more experienced consultant. In yet other centers, members of the senior hospital staff serve on a rotating basis. In but one center were the examining physicians confined to the senior staff members.

In but three centers are physicians paid for their services. In one, the physician gets \$4 per examination. In two others, the examiners are paid \$12 for each session they serve.

*Lay Personnel.*—In ten centers a paid lay director or secretary is employed. In all but two centers, volunteer lay personnel contribute their services as needed. In three centers the paid executive is a nurse who also assists in the examinations. Volunteer personnel is recruited from Gray Ladies, practical nurses, Junior League members, and similar local organizations.



# Conclusions

1. The cancer detection center has a place in the cancer control program as an experimental and demonstration service. As at present conceived, it cannot render an adequate community service for the following reasons, among others:

- (a) Physical inability to examine any significant percentage of the population in any reasonable period of time.
- (b) Incompleteness of the examination, which requires the examinee to seek further medical examination to confirm or rule out cancer.
- (c) Imposition on the physician's time to make examinations in the center that could be made as readily, accurately, completely, and far more cheaply in his own office on his own patients at a mutually convenient time.
- (d) Not enough physicians to staff any appreciable number of detection centers and still provide for the general medical needs of the community.

2. A more rigid filter of examinees should be used. The service should be confined to apparently well applicants, and those in low income brackets should have preferred appointments.

3. The absence of an adequate follow-up program for those examined, to reveal if they have secured the recommended additional examination or treatment, leaves a serious gap in the program.

4. Fewer than 20 per cent of examinees in detection centers are men. Greater emphasis should be placed on the examination of men. This is especially important in Michigan, where cancer deaths in men have exceeded such deaths in women for the past two years.

5. To obtain information of statistical value regarding the amount of cancer in that segment of the population with no signs or symptoms, i.e., the apparently well individual, it would be necessary to confine the patronage of these centers to those who had no signs or symptoms of illness of any kind.

6. Housing and equipment of a detection center are no criteria of its ability to render an acceptable service to a community. Its usefulness is measured

solely by the qualifications of physicians supplying the service.

7. Once a cancer is discovered, the patient should thereafter be under the care of some physician. The time of the detection center should not be devoted to re-examination of patients with proved cancer. Unless care is exercised, these centers can become consultation clinics for old cancer patients.

8. The use of public funds for the benefit of but a small minority of the population cannot be justified except when such uses are to demonstrate the general value of such a program. Thereafter the funds should be devoted to service for the greatest possible number of those entitled to it.

9. It is believed that the facts adduced by this survey have shown that, while existing cancer detection centers in Michigan are rendering a service to the control of cancer by demonstrating to the public and the medical profession the value of periodic medical examinations, they are unable to provide such service on a community-wide basis. They must still be considered an experiment as a community service project.

## MSMS

All patients with hoarseness should be subjected to laryngeal examination.

Hoarseness or alteration in the voice lasting more than a few weeks in a patient over thirty may indicate carcinoma of the larynx.

Almost all deaths from cancer of the lip are now due to ignorance, poverty or neglect.

In some communities doctors are willing to teach groups of laymen that the discovery of a lump in the breast is a positive indication for immediate exploratory operation; that any irregular bleeding or spotting should indicate to an intelligent woman that an immediate exact diagnosis is necessary no matter how much trouble is entailed or how difficult it may be; that chronic hoarseness must be explained and that bleeding from the bowel or blood-stained stools cannot be lightly ignored. In such communities the number of early diagnoses of cancer is constantly increasing.

The five-year control rate for cancer of the lip depends upon the age of the patient and the type and extent of the lesion, but more particularly on the stage of the disease at which the patients seek expert advice. Clinics in metropolitan areas report a recovery rate of about 75 per cent.

# The Hillsdale Plan for Tumor Detection

## *Plan of Organization and Report of the First Year's Experience*

By MSMS Cancer Control Committee

**I**N THE SUMMER of 1947, a pilot survey of all cancer patients seen by the physicians and/or treated in the hospital in Hillsdale County in 1946 was carried out under auspices of the Cancer Control Committee of the Michigan State Medical Society. This survey showed that more than 50 per cent of these cases were accounted for by cancer of the skin, breast, cervix, and rectum. It was recognized that these four sites could be easily examined by a physician in his own office without recourse to any unusual equipment or procedure.

The physicians of this county were being urged to organize a cancer detection center to be housed in the Hillsdale hospital. After careful consideration they decided a detection center was not suited to that community for the following reasons, among others:

1. The need to remodel hospital space and to provide additional equipment for the examinations.
2. The need for competent assistants to staff the service.
3. The need for special record forms.

These three items would require a large financial outlay before the center could receive patients.

4. Physicians would have to devote considerable time to making examinations in the center that could be made more easily in their own offices during office hours and without the expenses indicated above. There are not enough physicians in the county to offer medical service at a detection center without taking too much time from their regular practice.

In place of a detection center, the Hillsdale County Medical Society in co-operation with the County Health Department developed a plan for the examination in physicians' offices of the skin, breast, cervix, and rectum of women forty years of age or older, at six-month intervals. Younger women and men were not excluded, but the

initial target was the older group of women. In practice, while the older women have formed the bulk of those examined, younger women and men have also been examined.

Publicity, jointly sponsored by the medical society and health department, was given to the plan by a series of articles in the local daily newspaper. Results of the survey were discussed and interpreted in terms of danger inherent in neglect of early signs and symptoms and the tragic loss of life resulting from delay on the part of those patients seen by the physicians during the previous year. Details of the plan were presented so that any one interested knew what to expect from the examination.

Each of the physicians participating in the plan had had a thorough medical and hospital training and a minimum of several years of active practice. However, before offering the plan to the public, they invited four physicians from the University Hospital, Ann Arbor, each with extensive experience in diagnosis of one of the four types of cancer with which the plan was primarily concerned, to give them a refresher course, especially discussing the differential diagnosis of each type of cancer.

The working of the plan is simple. All examinations are made during regular office hours. The examinee makes an appointment with his physician, who allots the necessary time from his appointment schedule for that day. It is seldom that the examination is confined to the four basic sites noted previously, for, as a result of a careful history, the physician follows all suspicious signs or symptoms in accessible parts of the body to identify or rule out cancer, regardless of the tissue or organ involved. The oral cavity in both sexes and the prostate gland in men have been routinely included in practically all examinations, so that in the future these two sites will be added to the four originally forming the basic examination under this plan. In most cases, a routine blood count and urinalysis are made.

Fees charged have been in keeping with the amount of time and work necessary for each examination. As fees for medical service in general vary from place to place and even among physicians in the same community, it does not seem desirable or possible to stipulate a definite fee for these examinations that would be applicable to all parts of the state. In Hillsdale County no one is denied examination because of inability to pay.

Prepared on request of the Hillsdale County Medical Society by the Cancer Control Committee, Michigan State Medical Society.



# HILLSDALE PLAN FOR TUMOR DETECTION

The local branch of the American Cancer Society has established a revolving fund to pay for the examinations of the medically indigent who certify their willingness to repay the loan when able to do so. The cost of examination of the needy indigent is also being met from this same revolving fund.

The plan involves little extra paper work for the physician. Each physician is provided with

Location	Neg.	Susp.	Cl Ca.	Biop.	Path. report
Oral cavity					
Skin					
Breast					
Cervix					
Rectum					
Prostate					
Additional information and followup recommendations					

Fig. 1.

☐ CONFIDENTIAL RECORD  
 Patient Examination  
 BY \_\_\_\_\_  
 Name of Physician \_\_\_\_\_  
 Address \_\_\_\_\_

**TUMOR DETECTION PROGRAM TALLY SHEET**  
HILLSDALE COUNTY  
MICHIGAN

Date \_\_\_\_\_  
 Month \_\_\_\_\_ Year \_\_\_\_\_  
 (Send this sheet 1st of each month  
 To- County Health Director  
 39 North Street  
 Hillsdale, Michigan)

PATIENT DATA										Examination Result			Visit Number						Re-ported	
Date	Name	Address	Two	Sex	Age	Neg	Susp	ClCa	1	2	3	4	5	6	Yes	No				
1																				
2																				
18																				
19																				
20																				

Please Return to \_\_\_\_\_ within 7 days  
 Physician Signature \_\_\_\_\_

Data Recorded-Date \_\_\_\_\_  
 Signature Co. Health Director  
 Hillsdale, Michigan

Fig. 2.

## CASE AND CONTACT REGISTER

No. \_\_\_\_\_

Case ☐    Contact ☐

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Address \_\_\_\_\_  
 Occupation \_\_\_\_\_  
 Physician \_\_\_\_\_  
 Reported by \_\_\_\_\_  
 Source \_\_\_\_\_  
 Diagnosis \_\_\_\_\_

Color: W C    M F    Birth Date \_\_\_\_\_  
 Township \_\_\_\_\_  
 Township \_\_\_\_\_  
 Date Reported \_\_\_\_\_  
 Marital Status \_\_\_\_\_  
 Type \_\_\_\_\_

Fig. 3.

tally sheets, note book, and cards for recording positive cases. The addition of a few items by means of a rubber stamp outline (Fig. 1) to the physician's own record form permits the appropriate checks and notes to be made at time of the examination. On subsequent visits of that patient, it enables the physician to see at a glance when the previous examination was made and also the findings. The examinee's name is entered on the tally sheet (Fig. 2) in use for that month

which is kept in a standard loose-leaf notebook provided with index dividers by months. At the end of the month the tally sheets are sent to the County Health Department, where a confidential master file is kept on special cards (Fig. 3). The Health Department is using the first section of their Reportable Disease Register card for this purpose. The tally sheets are then returned to the respective physicians who file them in the notebook under the month six months hence, i.e.,

# HILLSDALE PLAN FOR TUMOR DETECTION

**It is very important that you do not allow anything to prevent your next visit to your doctor in six months.**

**If . . in the meantime . . you should notice anything abnormal, such as a lump in the breast or unnatural bleeding, do not wait six months. Go to your physician at once.**

Your next examination should be in .....

Call for appointment .....

Telephone Number .....

Fig. 4.

January examinations are filed under July so as to check the return visits for that month with the original list. At the time of examination the examinee is told to return in six months and is given a small leaflet explaining the plan and naming the month for the re-examination. The summary of this leaflet and the reappointment blank are shown in Figure 4.

It will be noted that the tally sheets do not give the location of the lesion; they simply show that the examination was negative or suspicious, or that cancer was diagnosed clinically. When suspected or clinical cancer is diagnosed, a card (Fig. 5) is sent to the County Health Department for separate confidential filing and follow-up. These cards show more detailed information than does the tally sheet. It is assumed that the physician will follow up all suspicious cases until diagnosis is completed. If no subsequent report confirming the diagnosis is received after a reasonable period of time, the custodian of the records places the card in the "no cancer found" file.

The County Health Department is an integral part of the Hillsdale Plan. By keeping a confidential master file of all examinees and proved cancer cases, it serves as a central registry for all known cancer patients in the county. In time these records will become valuable for statistical evaluation of the cancer problem in Hillsdale County. By means of these records the health department often can assist in tracing lost cases. It can also assist in proper publicity about the plan, thus keeping the subject before the people. Experience so far gained shows that the co-operative effort between the physicians and the health department is worthwhile, although it is not possible to assess the full value of this co-operation on a final basis until more experience has accumulated.

Out of the first year's experience with this plan,

## CANCER CASE REPORT

Date \_\_\_\_\_

Patient's Name \_\_\_\_\_ M F W C M S W D

Address \_\_\_\_\_ Twp. \_\_\_\_\_ Age \_\_\_\_\_

Is this a newly diagnosed case? YES  
NO

SITE \_\_\_\_\_

STAGE: \_\_\_\_\_ Early \_\_\_\_\_ Mod. Advanced \_\_\_\_\_ Far Advanced

METASTASES: YES  
NO --Path. Report of  
Location: Tissue or Biopsy:

TREATMENT: Local Facilities  
Referred Elsewhere \_\_\_\_\_ M.D.

Fig. 5.

no criticisms have been heard about the type of the examination or the fees charged. The public appreciates the service and is utilizing the available time of all participating physicians. Physicians appreciate the opportunity to render this worthwhile service to their patients in their own offices.

During the first year of operation, 1,077 men and women were examined. One hundred and seventy-one of these were re-examined before the end of the year, making a total of 1,248 examinations.

TABLE I. EXAMINATIONS AND RE-EXAMINATIONS MADE IN 1948

Sex and Age	First Examination	Re-examination	Total Examinations
Women under 40	212	14	226
Women over 40	786	153	939
Men—all ages	79	4	83
Total	1,077	171	1,248

Thirty-five new cancers were discovered by these special examinations, a percentage of 2.8 for total examinations, and 3.25 for the 1,077 individuals who participated. This percentage of positive cancer findings compares favorably with the percentages found by any other method of examination yet proposed and is much higher than in most of them.

TABLE II. FINDINGS OF EXAMINATIONS MADE IN 1948

Sex and Age	Negative	Suspicious	New Clinical Cancer*	Old Cases Checked
Women under 40	210	13	1	2
Women over 40	812	97	22	8
Men—all ages	62	6	12	3
Total	1,084	116	35	13

\*Proved by tissue examination or x-ray findings.  
Per cent new cancer cases in total examinations 2.8  
Per cent new cancer cases in individuals examined 3.25

Primary cancer was found in the skin and oral cavity in eleven cases. Sixty per cent of cancer found in men and 18 per cent found in women were in these two sites. The breast was next in



# HILLSDALE PLAN FOR TUMOR DETECTION

frequency with eight cases; cervix and rectum with three cases each; colon with two cases, and the cecum and prostate with one each. Metastatic lesions in the lungs, bones, and lymph glands accounted for six cases.

TABLE III. DISTRIBUTION OF CANCERS FOUND BY SITE AND SEX

Site	Total	Women	Men
Skin and oral cavity	11	4	7
Cervix and uterus	3	3	—
Breast	8	8	—
Rectum	3	2	1
Colon	2	2	—
Cecum	1	—	1
Prostate	1	—	1
Metastatic lesions, (Lungs, bone and glands)	6	4	2
Total	35	23	12

In less than 26 per cent of new cancer cases was the disease found in early stages. In almost 63 per cent it was moderately or far advanced.

TABLE IV. DISTRIBUTION OF CANCERS FOUND BY STAGE OF DEVELOPMENT

Stage	Number	Per cent
Early	9	25.7
Moderately advanced	11	31.4
Far advanced	11	31.4
Not stated	4	11.4
Total	35	99.9

In addition to the thirty-five new cases found by the Hillsdale Plan for Tumor Detection, fifteen additional new cases were discovered in patients who were at home or in the hospital. While these cannot rightfully be classed with those found by the special examination in the physician's office, they are of interest, particularly as to the stage of development when discovered. In this group, less than 7 per cent were found to have cancer in early stages; the other 93 per cent were in moderately or far advanced stages of their disease. In none of this group was the presence of cancer known to the physician before his examination.

TABLE V. CANCER FOUND IN HOME OR HOSPITAL EXAMINATIONS

Stage	Number	Per cent
Early	1	6.67
Moderately advanced	3	20.00
Far advanced	11	73.33
Total	15	100.00

According to the 1940 Census, there were 5,790 women over the age of forty in Hillsdale County. The 786 who have been examined under this plan

comprise 15.3 per cent of this population group. Among these 786 women, twenty-two new cases of cancer were discovered, a percentage of 2.8.

In 1940, there were 3,672 women between the ages of twenty and forty in this county, of whom 212 (5.75 per cent) have been examined with the finding of one case of cancer.

As has been the experience in all such undertakings, relatively few men have requested these examinations. In Hillsdale County, men formed but 7.3 per cent of those examined, but 33 per cent of all new cancers were found in this sex. Nineteen per cent of the men examined had cancer, and of these, 60 per cent were in a moderately or far advanced stage of the disease at time of examination.

The first year's experience with the Hillsdale Plan has been most encouraging. A significant percentage of the adult population of that county has taken advantage of the examinations, and the percentage of cancers discovered has been well above the average for such programs in specially organized detection centers.

An important result of the year's experience with the Hillsdale Plan has been the increased interest of the participating physicians, many of whom have stated that they were much more alert to the possibility of cancer in all their patients than ever before. The number of examinations may be expected to increase as the program becomes better known and as experience shows the possibility of detecting cancer in the physician's office. The number examined will vary among physicians and will be determined in large measure by the amount of time the physician can devote to this work without neglecting other necessary elements of his practice.

## MSMS

The absence of abnormal physical findings on abdominal examination does not exclude carcinoma of the colon.

About 30 per cent of all cancers of the gastrointestinal tract occur in the rectum.

If digital and proctoscopic examinations are negative in a patient suspected of having rectal malignancy, x-ray examination of the colon is indicated to rule out a serious lesion higher up. On the other hand, digital and proctoscopic examinations are far more valuable in the diagnosis of rectal cancer than is x-ray.

# Carcinoma of the Breast

By J. E. Cooper, M.D., F.A.C.S.

Battle Creek, Michigan

MISS E. R., Community Hospital, was referred to me because of severe pains in her pelvis and legs. She had been refused an operation for carcinoma of the breast a year previous to this because of its extension and being inoperable at that time. At this time, the patient was having so much pain that it was necessary for her to be in bed practically all the time.

The patient's personal history was normal. She was never married, had had the usual infectious diseases, no operations, no serious illnesses, and no injuries. Her mother died of carcinoma, the location unknown. Her father was also dead, but the cause was unknown. She had one brother living and well.

For a considerable period of time, the patient had noticed a tumor in her left breast before consulting the surgeon who refused to operate. At this time there was a fair sized mass occupying a central portion of the breast. There were metastatic nodules in the axillary region. The tumor in the breast was still movable, however. The patient had been having x-ray treatments for the breast for a number of weeks. At this time, report of an x-ray examination of the pelvis and lumbar spine stated: "There is an extensive bone destruction involving the pelvic bones and lumbar spine. It is more pronounced around the right acetabulum and right sacro-iliac joint. In many places the cortex is broken through. The appearance is characteristic of a well-developed bone metastasis."

It might be well to state at this time that beginning in February when this patient was first seen, she was given 25 mg. of testosterone daily by hypodermic injection. Within a few days the pain was markedly relieved. Later she was given methyl testosterone, 10 mg. three times a day. The patient gained somewhat in weight and in well-being. She was able, after a few weeks, to get up and around, to do her own housework, and she was very comfortable.

On May 28, 1945, the breast was beginning to ulcerate and was quite odorous. I removed it under Avertin and nitrous oxide anesthesia. I removed the larger portion of this breast with a Bovie cau-



Fig. 1. Radiographs of left femur: (A) at time of fracture; (B) after healing.

tery to get rid of the odor and the ulceration. A microscopic diagnosis, after three months of medication with testosterone, was adenocarcinoma of the breast with ulceration of the skin, grade two.

On November 13, 1945, this patient was again hospitalized, and another elliptical mass was removed for a return of this growth. A report of a check at this time stated: "There is thickened mediastinal shadows that would suggest metastasis in the glands. The extensive metastasis in the pelvic bones and lower spine is showing an increased density due to the deposit of calcium. In comparing the previous examinations there is some improvement."

"On March 4, 1946, an examination still shows extensive metastasis in the right side of the pelvis and lumbar spine. In comparing this with previous examinations the lesion has not extended to any appreciable extent. There is noted a high degree of calcium deposit that would suggest some healing."

On August 14, 1946, the patient was unable to get out of bed because of an increased mobility in the left femur. Previous to this, she had been doing very well. She had been up and around and walking more than a mile down town. She was hospitalized August 15, and x-ray examina-



tions at that time showed "a fracture through the metastatic area of the shaft of the upper femur. The fragments were in good apposition but there is some upward bowing at the point of fracture."

hospitalized, she was put in traction and 25 mg. of testosterone was given hypodermically every day; she was always comfortable. Follow-up x-rays taken on October 15 showed "extensive mottling in the upper half of the femur characteristic of metastasis. The fragments of the old fracture are in good apposition. There is considerable evidence of healing."

Laboratory work done on September 14 showed: red cells 4,050,000; white cells 7,500; hemoglobin 79 per cent; segmented neutrophils 60 per cent; stabforms 7 per cent; lymphocytes 21 per cent; monocytes 4 per cent; eosinophils 2 per cent. Blood chemistry: inorganic phosphorus 4.0 mg; alkaline phosphatase 10.4 units; acid phosphatase 5.4 units; serum calcium 8.3 mg.

The condition of this fracture steadily improved, and it seemed to be quite firmly healed. The condition in the pulmonary area steadily grew worse, and the patient died on November 16, 1946, from pulmonary edema due to metastatic carcinoma of the lungs.

1. Carcinoma of the left breast *en curriasse*, with metastases to the ribs, pelvis, lungs, left femur, left adrenal, liver, and left kidney.
2. Healed pathological fracture of the left femur (Fig. 2).
3. Diverticulosis of the recto sigmoid.

The purpose in reporting this case is to show that there is definite healing in these carcinoma-tous metastatic areas with the use of testosterone.

MSMS

Any ulcer of the rectal mucosa should be viewed with suspicion of being malignant.

...

About 40 per cent of women with post-menopausal bleeding have cancer of the cervix.

...

Any irregular vaginal bleeding or unusual vaginal discharge in the latter part of the sexual life of a woman, during the climacterium, or following the menopause, should be immediately and thoroughly investigated. These symptoms at this stage of life must be viewed as due to cancer until proved otherwise.

...

Cancer of the cervix usually bleeds during examination or on contact.

...

Post-menopausal bleeding should never be attributed to a return of menstruation.

JMSMS



Fig. 2. Pathological specimen.

During all the time this patient was at home and in the hospital, she was given 30 mg. of methyl testosterone and she suffered no pain at any time; even the fracture was not especially painful. When

# Radical Surgery for Advanced Pelvic Cancer

By Alexander Brunschwig, M.D.  
New York, New York



THE MAJORITY of women who develop cancer of the cervix eventually die of this disease. Since the treatment for this condition at present is almost invariably by radiation, reasons for failure might be stated as follows: (1) extent of neoplasm beyond the stages of localization to the cervix, (2) radioresistance of the neoplasm, and (3) inadequate technique of therapy.

When there is persistence or recurrence of disease following irradiation therapy, the usual practice is to institute further irradiation therapy. This is done with the hope of restraining the progress of the disease. There is very little hope for prolonged control in these patients by a second or third course of irradiation therapy, but isolated instances of this are observed.

Postmortem studies have shown that at most one-half of the patients dying from cancer of the cervix exhibit spread of neoplasm beyond the pelvis; in one-half the patients the disease is still confined to the pelvis, the patients dying of uremia due to ureteral obstruction, hemorrhage or infection or a combination of all of these.

In view of the fact that cervical carcinoma is a neoplasm which remains localized in the pelvis for prolonged periods, it would appear to be a favorable type of neoplasm for surgical attack.

Therefore, in the past year at the Memorial Hospital it has become the policy to attack surgically the carcinomas that persist or recur following radiation therapy, providing at the time of examination and laparotomy there is no evidence of spread beyond the pelvis. These patients may be classified into several categories with variation in treatment as follows:

1. Where the carcinoma has recurred or persists in the cervix, with or without invasion of

parametria, a radical panhysterectomy by the vagino-abdominal approach is performed with radical excision of the pelvic lymph nodes. This operation can be performed even in the presence of clinical findings that would indicate a "frozen pelvis." It has been our experience that the impression gained from above and within the abdomen, that is, at laparotomy, often indicates less spread of the disease than is the impression from clinical examination by bimanual palpation.

2. After previous irradiation therapy and total hysterectomy with recurrences in the vaginal vault, the involved fundus of vagina and parametrial tissues are resected via the vagino-abdominal approach. Metastatic nodes that might be encountered along the great vessels of the pelvic walls are excised *en masse*, if necessary, on one side.

3. When there is involvement of one ureter, the radical operation with resection of the involved segment of ureter is carried out. The upper portion of the resected ureter is implanted into the colon.

4. When there is involvement of the rectal colon opposite the cervix: In a limited series of cases I have mobilized the entire vagina, uterus, adnexae and involved segments of pelvic colon, for excision, then performing an end-to-end anastomosis of the colon. Whereas the immediate anatomical result is satisfactory, in that there is no colostomy, recurrences have developed after brief intervals. This procedure has been given up in favor of the combined abdomino-perineal resection of the colon with removal of vagina, uterus and adnexae *en masse*.

5. Where recurrences have extended to involve the bladder, the radical panhysterectomy with pelvic lymph node dissection and total cystectomy is carried out. Both ureters are implanted into the colon. The operation is performed in one stage.

6. When bladder and rectal colon are involved, the entire pelvic viscera with perineal orifices (introitus and anus) are excised *en masse*. The ureters are implanted into the colon, and an end colostomy is made. Both urine and fecal matter are excreted through the colostomy. By means of the Rutzen bag which is sealed to the skin surrounding the colostomy, the patients remain "dry" and thus the management of this type of colostomy presents no difficulty. Patients who have undergone these operations have been returned to practically normal physical activity.

From the Memorial Hospital Center for Cancer and Allied Diseases, New York City.



TABLE I. SURGICAL MORTALITY

	No. Patients	Surgical Mortality
Radical panhysterectomy with pelvic lymph node dissection.....	20	0 (%)
Radical panhysterectomy with pelvic lymph node dissection, plus one ureter and portion of bladder .....	4	0 (%)
Radical panhysterectomy with pelvic lymph node dissection, plus total cystectomy, plus complete vaginectomy with or without excision of colon wall.....	13	2 (15%)
Total .....	37	2 (5.4%)
Excision of all pelvic viscera—colostomy, bilateral ureterocolostomy .....	29	7 (27%)

The data presented in Table I concern the surgical mortality in a series of patients with carcinoma of the cervix that has recurred after one or more attempts at control by irradiation therapy, with or without some type of operation. For purposes of discussion the patients may be divided into four groups, viz., A, B, C and D. In groups A, B and C, the lesion was confined to the cervix or had extended onto one ureter and/or involved a limited segment of bladder. In group D, it had extended to all pelvic viscera, necessitating complete excision of the pelvic viscera. According to current opinions generally held, these patients all were surgically untouchables. Yet actual experience in excising the growths has shown that the mortality is not inordinately high, given the conditions present.

### Discussion

The objective of the operations described above is to secure palliation by removal of all macroscopic evidences of recurrent or persistent neoplasms. The question arises whether such procedures have more to offer than repeated courses of irradiation therapy which should have a negligible immediate mortality. The disadvantages of leaving recurrent neoplasm *in situ* are: (1) it affords a focus from which distant metastases can occur, (2) the disease sooner or later gives rise to copious purulent and hemorrhagic discharges, (3) as the disease progresses the ureters may become occluded, (4) ultimately vesico-vaginal and recto-vaginal fistulas occur through necrotic tumor tissue. Complete surgical excision of the disease in the pelvis envisages the prevention of these complications or their postponement for periods greater than might be the case where disease is not taken out of the pelvis.

While experiences with these operations are still limited, some preliminary impressions have been obtained. Where all macroscopic evidence of disease has been removed from the pelvis, and

recurrences and metastases manifest themselves, these take the form of diffuse peritoneal spread and, finally, lead to the production of intestinal obstruction due to multiple metastases. The obstructions are difficult, if not impossible, to relieve because of their multiplicity and the marked deterioration in the patient's general condition. The degree of palliation obtained thus far, in most instances, appears to have justified the operation, since in most patients the operation was carried out not after failure of one attempt with radiation but after failure of several attempts and after the normal tissue tolerance dose for irradiation was reached or had been exceeded. Thus without operation there was no other form of treatment that offered the possibilities of relief.

### Summary

Radical panhysterectomy, with systematic lymph node dissection along the great vessels of the pelvic walls, may be carried out for palliation in patients who present persistent or recurrent cancer of the cervix after radiation therapy. A similar procedure may be carried out for recurrent carcinoma of the vaginal vault following radiation therapy and total hysterectomy. Panhysterectomy with combined abdomino-perineal resection of the colon, or with excision of a ureter, or with total cystectomy, may also be performed. Finally, complete excision of all pelvic viscera for recurrent cervical cancer involving bladder and rectum is a feasible procedure, and patients who have been bed ridden because of advanced pelvic cancer have been returned to full normal physical activity after receiving this operation.

≡≡≡ MSMS —

It is estimated that from 10 to 54 per cent of carcinomas of the tongue arise in leukoplakia. Patients with leukoplakia should be advised in proper mouth hygiene and dentistry, and should stop the use of tobacco.

. . .

The essential x-ray findings in cancer of the esophagus are the irregular filling defect with a punched out appearance or an annular constriction. The lumen is narrowed at the growth and the proximal portion of the esophagus is dilated if there is partial or complete obstruction.

. . .

The present high mortality rate from esophageal cancer is associated with its late diagnosis.

JMSMS

# Attempts at the Chemotherapy of Cancer

By Stanley P. Reimann, M.D., and  
Edwin T. Nishimura, M.D.  
Philadelphia, Pennsylvania

UNLIKE CHEMOTHERAPY of infectious diseases, experiments in the chemotherapy of cancer have been few and without such organization as grows from basic knowledge. We have heard it said that before Paul Ehrlich embarked upon his experiments in the chemotherapy of syphilis, he turned over in his mind the possibility of using the same approach to cancer. After much thought, he discarded cancer in favor of syphilis because the background knowledge of cancer was not sufficient at the time to make possible a systematic attempt at discovering chemotherapeutic controls. While we cannot vouch for the authenticity of this statement, nonetheless, all can see its appropriateness. Even today, the knowledge of where and how to begin chemotherapeutic ventures is so meager that the rationality of any beginning is open to question.

As in the chemotherapy of infections, the presumption must be in cancer that there is a chemical and/or physical difference between the growth of cancer and growth and development of corresponding normal tissue from which the cancer is presumed to arise. If we fall back on the general statement that wherever there are anatomic differences there must be also chemical and physical differences, we receive a stimulus to discover them. But whatever they may be, it is quite apparent that they are subtle in the extreme. Although all the chemical differences between, say, *Treponema pallidum* or the streptococcus or the staphylococcus and human tissues have not been entirely and clearly defined, nevertheless, many more differences are known in these cases than between normal cells and cancer cells. Certainly there are well-defined immunological differences between human cells and the cells of the above examples of organisms, and wherever there are immunological differences there also must be chemical and physical

differences. Some immunological differences also have been found between cancer cells and corresponding normal cells. But, to quote Woglom, "to find a substance which will destroy cancer cells is like finding something which would destroy the left ear and leave the right ear intact."

Not to labor the point too much, we should however indicate a few more difficulties, even though they cannot be definitely defined. The differences among cancer cells themselves, as expressed in the different degrees and probably also the qualities of differentiation which they exhibit, add to the difficulties; for theoretically a substance which would attack a cancer cell in one stage of its differentiation could be used without effect in another stage.

On the other hand, there is practically nothing known about the affinity, expressed in chemical terms, between cells and even the best known of our therapeutic substances. Thus, for instance, there must be some chemical and/or physical affinity between strychnine and the cells of the anterior horns of the spinal cord, for that is where strychnine exerts a profound influence. Just what are the chemical and/or physical unions with heart muscle cells and digitalis? If these analogies are valid, it can well be that a substance or substances will be found which will check or even destroy cancer cells without our understanding the mechanism. Fortunately, by now there are a few leads in the right direction, and it is not necessary for profitable experimentation to take a chemical catalog starting with A and going all the way through to Z to see what might happen. In other words, it is not quite so haphazard as hunting the proverbial needle in a haystack.

The leads have come, in the main, from so-called fundamental research in the physiology of cells. Thus, there seems to be more folic acid and inositol in cancer tissue than in corresponding normal tissue, and cancer cells have less calcium in them. We wonder if the latter is because they squander their capital by repeated division. The former, namely, more of a substance in spite of repeated division, is more exciting, and year by year a bit of this type of information is forthcoming. Can anyone think of a more difficult problem than that of intracellular chemistry and physics—ever changing, in constant flux, and yet according to a pattern—for in spite of constant inflow and outflow, cells maintain their fundamental species specificity and in general their patterns? It is like

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the old problem in philosophy—when is a table not a table? If it loses part of a leg and the part is replaced by a new piece of wood, and then a piece of the top is replaced by a new piece of wood, is it still the same table? But we do not need such metaphysical questions in the laboratory study of cellular behavior, even though they are amusing to think of in our leisure hours.

If, then, there are certain leads toward the chemotherapy of cancer, how can they be classified? A convenient method is as follows:

1. Substances which interfere with mitosis.
2. Substances which select cancer cells, such as dyes.
3. Differential growth inhibitors, most of which come under the heading of antimetabolites.
4. Selective cell poisons.

As an example of the first group, colchicine can be mentioned. This substance interferes with the formation of the spindle, and produces a spectacular picture in tissue culture. Thus, cells beginning to divide proceed until spindle formation, whereupon they are held in this state, while those that have passed this stage before the administration of colchicine keep right on until their mitotic cycle is finished. Within an hour or so after colchicine has been added to the medium of a tissue culture, large numbers of cells are seen all in the same stage of mitosis. Obviously, the question in intracellular chemistry is—With what compounds does the colchicine unite at that particular stage of mitosis? What are the chemical arrangements within the cells at that particular stage? After twelve to forty-eight hours, the effect of the colchicine is released and many of the cells proceed through the cycle; in others there is abnormal mitosis with production of polychromy and interference with the proper separation of the chromosomes. Thus botanists have produced bizarre varieties of flowers, as an example, on separate branches of plants by the injection of colchicine solution into the stems.

It was thought for a time that the administration of colchicine before irradiation would assure a maximum number of cells in mitosis—when irradiation has its greatest destructive effect. In human tumors it is found to begin about four hours after oral administration, and in twelve to twenty-four hours the effects are released. However, the dose required is very much greater than the ordinary therapeutic dose, and thus produces violent, even

bloody, gastroenteritis in many patients. Therefore, colchicine itself is not valuable in chemotherapy. Many modifications of the molecule have been made in order to reduce toxicity and yet retain mitosis-inhibiting powers, but none of the compounds thus far synthesized has been satisfactory.

No dyes have been found that are completely selective for cancer tissue. It is easy to understand what a boon such a discovery would be. Every microscopist knows the difference in degrees of staining between cancer cells and surrounding normal cells, but, as far as I know, up to the present there has been no real selectivity. The search, however, goes on, and enough has been learned of the chemical structure of various dyes which exhibit some slight selectivity to make it profitable to rearrange the molecules in still different ways.

Among the differential growth inhibitors we mention teropterin—which is pteroyl-glutamyl-glutamyl-glutamate. The history of its discovery from the time the pteroyls were discovered to be essential in the pigment of butterfly wings to the synthesis of folic acid (which is pteroyl-glutamate) is an interesting one. We will discuss this in more detail later, mentioning now a few of the generalizations about the antimetabolites.

Intracellular enzymes are quite specific. Isomeric forms of many compounds cannot be attacked; neither can many closely related compounds. When offered to cells, these compounds interfere with enzymatic action—conveniently called poisoning the enzyme—or even interfere with the formation of intracellular enzymes so that metabolism within the cell is halted. We need but remind ourselves that a seeming minor chemical change within a system such as is present within cells is often sufficient to produce far-reaching maximal changes in many other chemical reactions.

Among the selective cell poisons—unfortunately more poisonous than selective—are the nitrogen mustards and the bacterial polysaccharides. It is with the bacterial polysaccharides and with teropterin that our experience deals, and the remainder of this paper will rehearse details.

The story of the development of the polysaccharides from *B. prodigiosus* or *Serratia marcescens*, by Shear, from the old Coley's fluid, has been told a number of times. By now it has been amply demonstrated that the polysaccharides (and we use the

plural for we are not certain of the unity of the substances used) produce hemorrhage and necrosis in mouse tumors. The most spectacular picture is obtained in sarcoma, but mouse tumors which have differentiated as carcinoma also showed necrosis. As an example, a fair percentage of mice harboring the transplantable sarcoma called Sarcoma 37—an otherwise practically 100 per cent fatal tumor—can be cured, but the dosage required is attended by at least 30 per cent mortality. Nevertheless, the tumor destruction is so manifest that cautious clinical trials have been made at present in approximately 100 patients.

The tumors of wide variety, and in practically all patients were in an advanced stage, following resumption of growth after surgery or failure by irradiation to control it. It has now been amply demonstrated that in all types, with the possible exception of melanomas, the polysaccharides have produced the same type of hemorrhage and necrosis as in mice. The substance, prepared from *B. prodigiosus* by Shear and his collaborators at the National Cancer Institute, has been checked for sterility, toxicity, and potency in our laboratories. It is then administered intravenously or intramuscularly in doses of 20 mcgm. (gammas) and upward. Biopsies of conveniently located tumors have been performed before and after administration at various time intervals. Details of the necrosis can be found described by Diller of our institute. The change is identical in mice and man. In no case has a cure been effected, for (1) in no case was it justifiable to give a human being the dose calculated from the effective mouse dose, and (2) an immunity develops very rapidly, whereupon the substance becomes ineffectual.

In actual practice a patient, usually with advanced malignancy, is carefully studied and the vital organs are appraised. A biopsy is performed; the polysaccharides in saline solution are administered intravenously or intramuscularly in a dosage of about 20 mcgm. Often within twenty minutes, practically always within forty minutes, the patient begins to experience a chill; fever appears, the chill increases, the fever reaches 105° or even more, and lasts from two to six hours. Violent chills, rapidly succeeding each other, last for two or three hours. Many patients complain of pain in tumors where pain was not present before. In many, the tumors just under the skin swell, and ecchymosis appears in the skin over them. In twenty-four to forty-eight hours biopsies reveal

hemorrhage and necrosis. As the fever subsides, the patient is relieved of headache and backache, which occasionally are severe, and in twenty-four hours all symptoms due to the polysaccharides disappear, and the patient resumes eating and generally has no complaints. Doses are repeated in increased amounts every other day for five doses, until in some cases a maximum of 300 mcgm. is given in one dose.

As stated, in every case there was some hemorrhage and necrosis, with the exception of melanomas, only a few of which were influenced in twelve patients. The results are quite irregular. In some patients with Hodgkin's disease and lymphosarcoma, marked reduction in the size of the nodes occurred within ten days to two weeks. In others there was no influence. Fortunately in the former disease, the polysaccharides occasionally produce diminution in the size of the nodes after they have become refractory to irradiation. Once in a while sensitivity to irradiation is restored after polysaccharide administration.

Even though complete destruction of tumors has not been achieved in any patient, nonetheless, diminution in size and a loosening of the tumor has made it possible in several cases to do further surgery.

As a typical example: in a forty-five-year-old man with a fibrosarcoma arising in the right inguinal region, who had been operated upon several times over a period of four years and heavily irradiated a number of times, the mass finally assumed proportions and extensions too large and too fixed for operative removal, extending as it did over Poupart's ligament and retroperitoneally. Five administrations of polysaccharides diminished the size of the tumor, caused it to be much more sharply outlined, especially by ecchymosis, and caused it to become much more movable. The surgeon in performing a biopsy after treatment found that he could proceed further and managed to remove a huge mass, the outlines of which could be seen by the bloody necrosis. This occurred almost four years ago and has been followed by two minor recurrences which the surgeons have removed. With the exception of a swollen leg the patient has no symptoms.

This experience has been repeated several times, especially with fibrosarcomas.

There has been only one fatality which was ascribed directly to the polysaccharides. A patient with a polymorphocellular sarcoma of the shoul-



der was given two doses safely. The third dose was followed by collapse twenty-four hours after the administration and after the usual acute symptoms had disappeared. Autopsy disclosed innumerable petechial hemorrhages in every organ of the body.

From evidence obtained in animals, tissue culture, and various other procedures, it seems probable that the necrotizing properties of the substance are separate from the fever-producing and blood-pressure-lowering effects. At least two immune bodies have been detected, one appearing very rapidly, that is within twenty-four hours after the first administration, and the second some time later. Procedures of passive immunization against toxic action of the polysaccharides have been effective in mice, as found by Creech and his associates.

The obvious problems presented are (1) to reduce the toxic properties of the hemorrhage- and necrosis-producing substances, so that large doses can be given, and (2) to overcome the immunological properties.

Apart from the interest in chemotherapy of cancer, information of considerable theoretical value in chemistry and in immunology has emerged. Details of this have been published and others are in course of preparation and experimentation.

As a generalization, then, it may be stated that this type of cell poison offers justification for further chemical and immunological experiment, and that a few patients properly selected can be helped somewhat by its administration.

Teropterin, which has lately received considerable publicity, can be classed as an antimetabolite. An early theory of its method of action was that it entered cells in place of folic acid, which had been shown chemically to be present in large quantities in tumor tissue. Once inside the cells the teropterin was not metabolized, thus preventing the cells from using the essential folic acid which they need. Thus the cells were at least inhibited in their activities and some even destroyed.

Subsequent work, however, has shown that this theory is certainly no longer tenable in its entirety. To date we have used teropterin in a thorough study of thirty-two patients, and in partial studies of many more. Again the patients were all advanced and presented a wide variety of tumors.

The following is a summary:

Cases studied—thirty-two.

#### 1. Types of patients:

- 9 Carcinoma of breast
- 3 Carcinoma of cervix
- 1 Squamous cell carcinoma of lip
- 1 Squamous cell carcinoma of mouth
- 1 Carcinoma of rectum
- 1 Carcinoma of colon
- 1 Carcinoma of liver
- 1 Carcinoma of pancreas
- 1 Bronchogenic carcinoma
- 2\* Carcinoma of urinary bladder
- 1 Metastatic carcinoma submax L.N.—primary site unknown
- 3 Malignant melanoma
- 1 Seminoma
- 1 Endothelial sarcoma of bone
- 1 Angio sarcoma lt. thigh
- 1 Chondroma of spine
- 2 Hodgkin's disease
- 1 Subacute lymphatic leukemia

—  
32 cases

\*One patient received teropterin for one week only.

2. Up to June, 1948, nineteen patients were alive, and thirteen were dead.

#### 3. Effect of teropterin on appetite:

*Six patients* showed temporary improvement of appetite. Subsequently anorexia superceded.

*Two patients* continued to show excellent effect on appetite (five and six months). A few (including the two with prolonged effect on appetite) gained weight (up to 10 pounds).

#### 4. Effect on pain:

*Six patients* had slight to moderate relief from pain.

*Nineteen patients* had no relief.

*Seven patients* did not have pain at any time.

#### 5. Effect on tumor:

*One patient* showed reduction of metastatic mass of the hila of lungs and bone regeneration of previously osteolytic areas of spine and right hip.

*Thirty-one patients* showed no evidence of change in the appearance of tumor.

#### 6. Clinical effect:

*Three patients* showed improvement only in the "clinical picture" (weight gain, better appetite, improvement of well-being, symptomatic improvement, et cetera).

The dose as usually recommended is 10 mg. daily—obviously an empiric figure. Just enough of our patients showed signs of general improvement and a few of inhibition of growth, with one or two with actual disappearance of growth, to

make it worthwhile to try to develop methods for determining blood levels. In any case, the metabolism of folic acid and its derivatives, such as teropterin, in relation to growth and development, needs study, so Dr. Toennies and Mrs. Gallant of our institute developed methods whereby the levels of teropterin and folic acid can be determined in blood. The test objects are the organisms *Streptococcus faecalis* and *Bacillus casei* lactis, which are sensitive to extremely minute quantities of the substance. In a series of patients from whom blood was taken every hour and forty-five minutes over twenty-four- and forty-eight-hour periods, it was found that the levels maintained were quite different following a uniform dose. Further determinations showed that if the material was given three times within twelve hours in 10 mg. doses, the rise in the teropterin level of the blood was maintained for thirty-six to forty-eight hours. The question of whether it is advantageous to maintain a high level or not, in relation to clinical findings, is not answerable until more data accumulate. It could be that the maintenance of a high level from which tumor cells may absorb teropterin is beneficial, but on the other hand it may be that the tumor cells rapidly absorbing the teropterin leave a low blood level. More data are needed.

Obviously too, the introduction of an isotope will help answer the above important questions.  $C^{13}$  and  $C^{14}$  may be used in animals, but naturally only  $C^{13}$ , which is non-radioactive, can be used in human beings.

At the present time, therefore, we have patients receiving 30 mg. intramuscularly a day, and others receiving 30 mg. in three doses during the course of twelve hours and then not until the third day, whereupon the procedure is repeated.

As to generalizations, it is extremely difficult if not impossible, as everyone knows, to predict how fast tumors will grow in a given patient, and how soon they will kill. Unfortunately only guesses can be made. The following two histories will illustrate: A physician had a carcinoma of the rectum removed. Two years later, he began to lose weight, and masses appeared in the upper abdomen, obviously in the liver, which grew quite rapidly. He soon became bedfast, and jaundice appeared; there was weight loss of 20 to 25 pounds, with vomiting and prostration. Usually, patients in this situation, especially when jaundice intervenes, die within a few weeks. Teropterin in 30

mg. doses was given; his jaundice disappeared, nausea and vomiting ceased, his appetite returned, he gained weight, he went about his business and felt quite well for five months. The masses remained the same, as nearly as could be determined. He then suddenly went down hill and died within two weeks. Shall we say that there was distinct inhibition of rates of growth of the obviously palpable tumors? At least we can say that his general nutrition was much improved.

Another patient operated upon for cancer of the rectum, but found to have numerous metastases to the liver, had his abdomen closed with nothing done, since there was no obstruction. He was started with 30 mg. of teropterin daily, a dose continued without interruption. Six months later he was twelve pounds heavier, felt entirely well, was going about his business, taking a vacation with golf, et cetera. Shall we say the rates of growth of the metastatic tumors in his liver were inhibited? At least at this time he is in excellent condition, and outside of a small amount of bleeding at stools, which are regular, has no complaints.

More of similar histories could be cited. Our best patient had shadows in the lungs on x-ray films, with cough, loss of weight, and general debility, two years after a breast amputation. After two months of teropterin administration, it was difficult to detect shadows in the lungs, the cough had completely disappeared, 12 pounds in weight were added, and her general condition excellent except for pain in the back. At the time when teropterin was begun, x-ray films disclosed destruction of several lumbar vertebrae. While the shadows in the lungs grew smaller and practically disappeared, along with her cough, the destruction in her vertebrae was doubtfully repaired. At the present time she is free from cough, but on account of persistent pain in her legs has had a cordotomy performed. This, done in another hospital, was preceded by a chest film. The roentgenologist was quite in doubt as to metastases in the lungs. These doubts were resolved when he was shown the original plate taken about eight months before.

If generalities are wanted, it may be said that in an occasional patient teropterin is of some use, at least in promoting better nutrition and in relieving certain symptoms. Again it may be stated that the field of experimentation with antimetabolites should be vigorously pursued.

In our institute a number of pyrimidines have

*(Continued on Page 484)*



# Carcinoma of the Upper Stomach and Thoracic Esophagus

By Alfred Large, M.D., Joseph L. Posch, M.D.,  
and David Dolese, M.D.

Detroit, Michigan

THE HIGH incidence of carcinoma of the stomach and its tremendous death toll are generally appreciated. What is not so well known, however, is the fact that 15 to 20 per cent of gastric carcinomas lie in the cardiac or fundic portions of the stomach, and that these lesions, together with malignant growths of the thoracic esophagus, comprise approximately 10 per cent of all gastrointestinal tract carcinomas below the pharynx.<sup>7</sup> During the past ten years, great advances have been made in the treatment of these lesions of the upper stomach and thoracic esophagus. The Torek procedure,<sup>10</sup> with transplantation of the upper esophagus into the back or neck, and subsequent construction of an extrathoracic esophagus, was never satisfactory and has been abandoned. In its place has been developed an operation by which it is now possible to resect any part or all of the thoracic esophagus, and to restore the continuity of the gastrointestinal tract by joining the stomach to the esophagus within the chest.<sup>1-6,8,9</sup>

The purpose of this paper is to present three case reports which illustrate important principles in treatment of these lesions and which show that the best form of palliation in advanced cases of this type is obtained by radical resection.

*Case 1.*—J. B., a white man, aged fifty-six, was admitted to the U.S. Marine Hospital on November 26, 1948, with a history of back pain and a 60-pound weight loss in one year, and occasional regurgitation of food for three weeks. He had been treated for pulmonary tuberculosis in the past, but no evidence of activity of the acid-fast process was found. Barium studies revealed a constricting lesion of the lower esophagus and upper stomach (Fig. 1a).

Operation was performed on December 9, 1948. Through a combined left thoraco-abdominal incision, a large carcinoma of the cardiac portion of the stomach was found to be invading adjacent organs, but showed no

From the Department of Surgery, Wayne University College of Medicine, the Detroit Receiving Hospital, and the U.S. Marine Hospital, Detroit, Michigan.



Fig. 1. *Case 1.* (a) Preoperative roentgenogram after ingestion of barium, showing irregular constricting defect of lower esophagus and cardia. (b) Postoperative roentgenogram. Barium passes freely through the esophago-gastric anastomosis which is situated low in the chest.

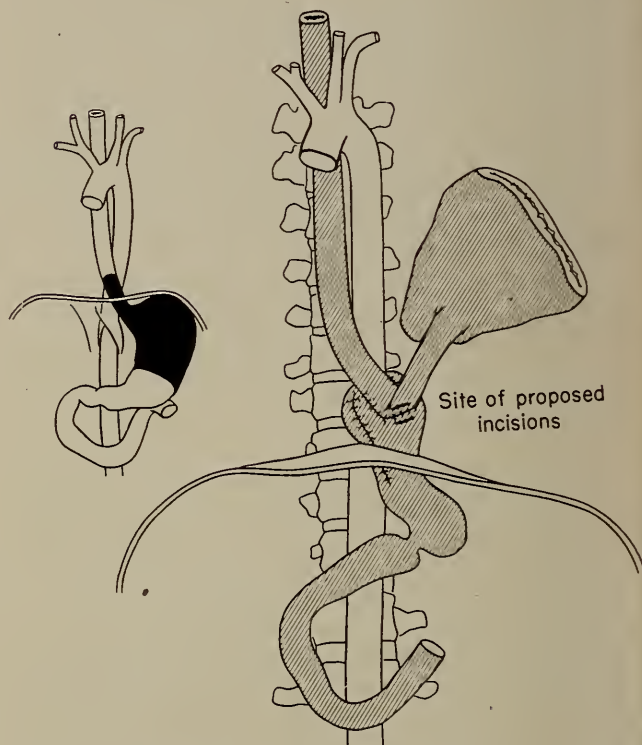


Fig. 2. Drawing to show the method of anastomosis in Case 1. The upper stomach is closed. A two-layer interrupted silk anastomosis is performed. The outer posterior layer is shown. Inset shows the amount of stomach and esophagus removed but does not show the adjacent involved structures which were removed with the lesion.

evidence of distant metastasis. The lower esophagus and upper stomach containing the tumor, and with it the spleen, parts of the body and the tail of the pancreas, part of the left lobe of the liver, and the central portion of the diaphragm with its crura, were resected in one piece. All grossly carcinomatous tissue was removed. The distal stomach was then anastomosed to the esoph-



Fig. 3. Case 2. (a) Preoperative roentgenogram after ingestion of barium. The filling defect is seen at the junction of the middle and lower thirds of the esophagus. At operation the tumor was found to extend a good deal higher than the film would indicate. (b) Postoperative roentgenogram, showing the level of anastomosis.

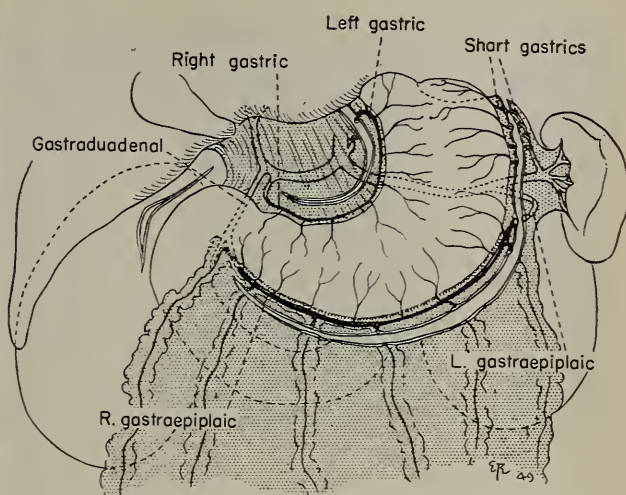


Fig. 4. Drawing to show method of mobilization of the stomach. Great care is taken to preserve the right gastric and right gastroepiploic vessels, together with the vascular arches along the curvatures, since these channels constitute the sole remaining blood supply to the fundus. If necessary, the peritoneum along the lateral border of the duodenum may be incised as shown, to allow further mobility.

Case 2.—D. A., a white man, aged fifty-five, was admitted to the U.S. Marine Hospital on June 24, 1948, with a history of a 15-pound weight loss in six months and difficulty in swallowing for three weeks. Esophagogram (Fig. 3a) showed a constricting lesion at the junction of the middle and lower thirds of the esophagus.

Operation was performed on July 23, 1948. The left chest was opened through the bed of the eighth rib, and a carcinoma of the lower mid-portion of the esophagus was found. It was freed without difficulty. The diaphragm was then opened, and although no metastases had been encountered in the chest, a walnut-sized mass was found along the lesser curvature of the stomach. This mass was adherent to the posterior abdominal wall. However, it was possible to remove the lower esophagus and cardiac portion of the stomach so as to include the mass of nodes in the specimen. The cardiac end of the stomach was closed, and after mobilization (Fig. 4), the stomach was drawn up into the chest and anastomosed to the esophagus below the arch of the aorta (Fig. 5). The patient had a temperature of 102° F. the day after operation, but this quickly fell to normal and his course was uncomplicated. Postoperative barium swallow showed a well-functioning stoma (Fig. 3b). The pathological report was squamous carcinoma of the esophagus with lymph node metastasis.

At the present time, seven months after operation, the patient eats and swallows without difficulty, but recent epigastric discomfort indicates probable metastatic recurrence.

Case 3.—L. J., a sixty-six-year-old colored man, was admitted to the Detroit Receiving Hospital on November 21, 1948, with a history of dysphagia for three weeks. Physical examination showed a small umbilical hernia but otherwise was not contributory. No nodes were palpable in the neck. Esophagogram (Fig. 6a) showed an obstructing lesion which on esophagoscopy proved to be

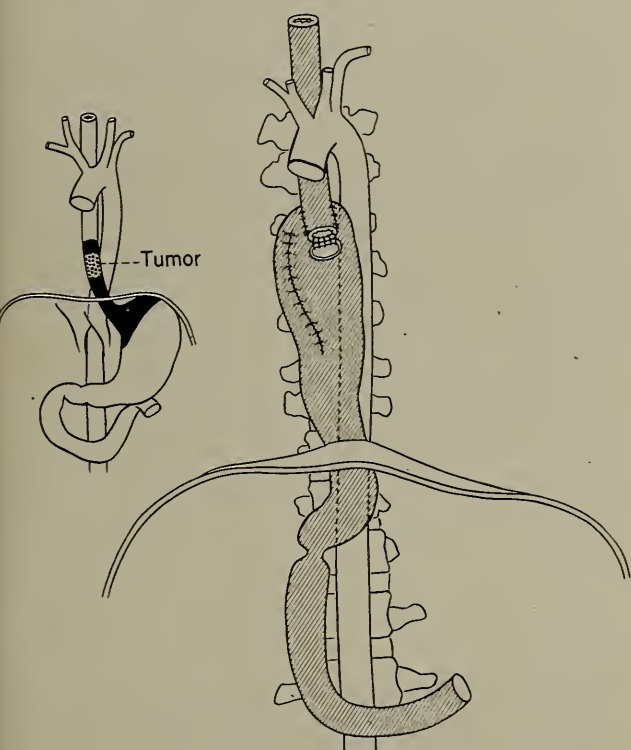


Fig. 5. Drawing to illustrate the procedure used in Case 2. The mucosal layer of sutures is placed with care, all knots lying within the lumen. Inset shows the amount of stomach and esophagus excised but does not show the node metastasis removed with the specimen.

agus in the chest (Fig. 2). The postoperative course was uneventful. The pathological report was adenocarcinoma of the stomach invading the adjacent organs by direct extension.

At the present time, two months after operation, the patient feels well, eats and swallows normally, but is somewhat weak and has not as yet returned to work.



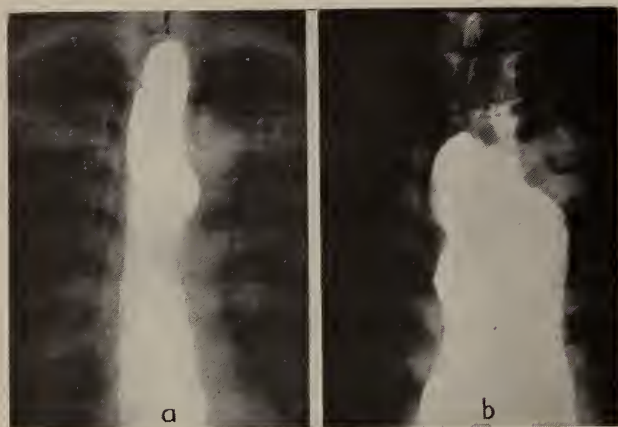


Fig. 6. Case 3. (a) Preoperative roentgenogram after ingestion of barium, showing almost complete obstruction of the esophagus just below the arch of the aorta. (b) Postoperative roentgenogram. The anastomosis is seen to lie at the level of the sternoclavicular articulation.

26 cm. from the upper incisor teeth and 11 cm. below the cricoid.

Operation was performed December 1, 1948. The left chest was opened through the bed of the sixth rib, and a large tumor of the esophagus was palpated behind the aortic arch. No metastasis was evident, but the tumor was quite adherent to adjacent structures. The aortic arch was mobilized and the tumor freed with considerable difficulty. The entire thoracic esophagus was then dissected out of its bed, the diaphragm incised, and the stomach mobilized and brought up into the chest. The cardia was cut across and its distal end inverted. The esophagus with its tumor was drawn out from behind the aortic arch. The stomach was passed up to the apex of the chest behind the aortic arch and anchored there. The fundus was then anastomosed to the esophagus above the arch, and the specimen cut away after the anastomosis had been partly completed (Fig. 7). Postoperative course was smooth. The pathological report was squamous carcinoma of the esophagus. The tumor had invaded periesophageal tissue, but the line of removal was beyond any microscopically visible tumor cells.

At present, two months after operation, the patient eats and swallows normally, and feels well. He is gaining weight. X-rays show a high, well-functioning stoma (Fig. 6b).

### Comment

These cases illustrate the manner in which the stomach may be anastomosed to the esophagus: (1) low in the chest (Case 1), (2) at a higher level but below the arch of the aorta (Case 2), and (3) above the aortic arch (Case 3). In each case the adequately mobilized stomach was drawn up to its new position in the chest and anchored there without difficulty, so that there was minimal tension on the suture line between stomach and esophagus. The high intrathoracic anastomosis

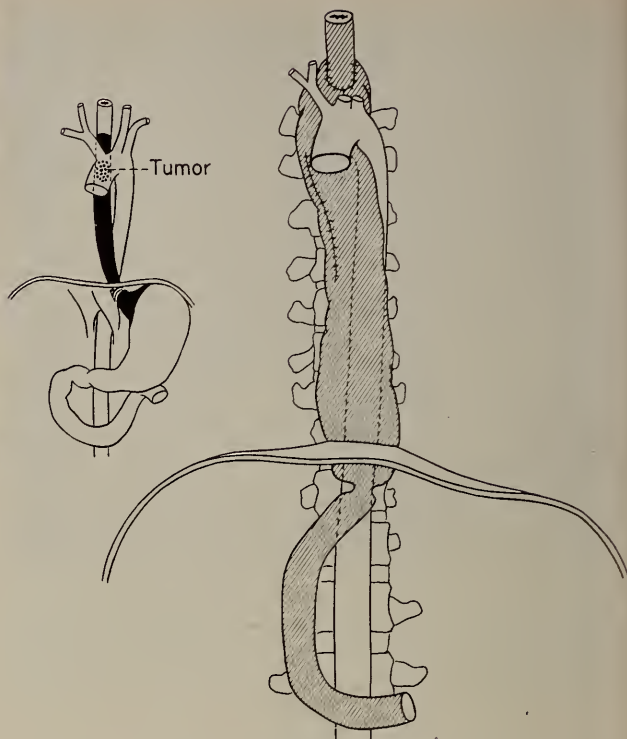


Fig. 7. Drawing of operation in Case 3. The two-layer interrupted silk anastomosis has been completed. Inset shows the amount of esophagus removed.

performed in Case 3 by drawing the stomach up medial to and behind the aortic arch permitted the long tubular stomach to lie nicely in the esophageal bed in the mediastinum. This method, when possible, is preferred to an anastomosis lateral to the aortic arch, for it permits the high thoracic esophagus to lie in its normal position with minimal interference to its blood supply. As well as this, the stomach, since it is placed within the mediastinum rather than in the left chest, is not likely to interfere with postoperative pulmonary ventilation.

These case reports also show that local spread does not contraindicate resection, provided all grossly carcinomatous tissue can be removed. Five such cases (including the three reported) have been seen in a recent six-month period. All were operated upon. Resection was done in four, but had to be abandoned in the fifth because the lesion was frozen to the aortic arch. All five patients are alive and have gone home from the hospital. Postoperative morbidity was surprisingly small.

Since these cases have all been operated upon recently, we are unable to tell what chance of cure exists. However small that chance may be, enough time already has elapsed to convince our colleagues and ourselves that the operation is well worth-

while from the point of view of palliation alone. These patients are comfortable, they can sit at the family table and enjoy their meals, and they can swallow food normally. Knowing the miserable course patients who have untreated carcinoma involving the esophagus must anticipate, we thus feel that resection should be done whenever possible, even in certain advanced cases which would have been considered inoperable a few years ago.

### Conclusion

The treatment of carcinoma of the upper stomach and thoracic esophagus is radical resection with esophagogastrostomy. The majority of such cases seen today are advanced, so that the chance of cure is small, even though excellent palliation may be obtained. As time passes, it is reasonable to expect that the percentage of early cases coming to operation will increase, and that in this way there will develop a reasonable curability rate for malignant lesions of this region.

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MSMS

Procrastination on the part of the patient with stomach cancer is bad but similar procrastination on the part of the physician is worse.

...

Complete removal of the lesion by surgical excision is the only means of curing gastric carcinoma.

...

Any disturbance of intestinal function, especially in a patient over thirty-five years of age, should suggest possible carcinoma of the colon.

...

Approximately 50 per cent of carcinomas of the cecum and ascending colon are resectable when diagnosed. Following removal, 40 per cent of the patients remain well for five years.

## Radiation Effects on the Skin and Their Treatment

By Arthur R. Woodburne, M.D., and  
Osgoode S. Philpott, M.D.,  
Denver, Colorado



A. R. WOODBURNE, M.D.

THE MATERIAL here presented is based on the study of 100 patients showing evidence of damage of the skin due to radiation. We have analyzed this material and will try to present here conclusions reached on the reason for the damage, the extent and histopathology of this damage and the best methods in our experience of the treatment of this damage.

We will limit our discussion to that radiation damage evident on the skin since this is the most usual site of damage. Damage produced in internal organs by heavily filtered and high voltage therapy and that produced by deep implants of radium or radon will not be considered.

### X-Ray or Radiation Burn

These terms should be excluded from our medical teaching and terminology since the physical appearance and symptoms of a burn are usually not evident, and since the serious part of the radiation damage is not due to any burning effect.

Radiation damage as applied to the skin manifests itself in a series of phenomena which have been traditionally classified as first, second and third degree, just as burns are classified. This is also inaccurate, since the clinical picture beginning as a simple erythema may progress through all the stages indicated above. The erythema dose is generally spoken of for all radiation effect, and doses slightly above this produce a diffuse erythema with slight edema in the area irradiated. This may subside with some pigmentation which will last for a few weeks to months and finally disap-

Presented at the eighty-third annual session of the Michigan State Medical Society, Detroit, September 22, 1948.

The material for this report was collected from the Departments of Dermatology and Tumor Surgery, Fitzsimons General Hospital, U. S. Army, Denver, Colorado; the Department of Dermatology, University of Colorado School of Medicine, Dr. O. S. Philpott, Professor; and the private practice of Dr. O. S. Philpott and Dr. A. R. Woodburne, Denver, Colorado.





Fig. 1. Radiodermatitis of hands following x-ray therapy of recurrent dermatitis.

pear. In other cases with slightly larger doses the pigmentation will disappear leaving a skin dry, atrophic and depigmented. Later ectatic vessels will develop in the area, and in some sufficient obliteration of deeper vessels will occur so that ulceration will supervene.

The dosage to a certain area is extremely important in determining the ultimate result. However, the size of the area treated is of even more importance since late sequelae are nearly always the ultimate effect of an obliterative vasculitis so that the more vessels damaged the more deep and extensive the resulting area of damage.

In treating skin malignancy, an area 1 centimeter in diameter may receive 5,000 or 6,000 roentgen units and the resultant area will be soft, pliable and functionally adequate; however, if an area 10 to 15 centimeters in diameter is treated with the same dose, there will result a hard, sclerotic patch which probably will ulcerate periodically and will never give an adequate functional result, with the probability of radiation cancer as a sequel.

#### Idiosyncrasy

The question of idiosyncrasy to x-ray and radium effect has frequently been raised to explain

untoward radiation damage. The consensus of a large group of radiologists and dermatologists queried on this point is that no true idiosyncrasy occurs; however, there are some physical conditions which seem to make the skin more sensitive to radiation effect. Hyperthyroidism makes the skin more sensitive to radiation. Dermatologists have long known that a skin area showing marked vascular congestion reacts more easily to radiation. This is noted especially in rosacea. Infants' and women's skin is slightly more sensitive than men's to radiation. Flexural surfaces of the body are slightly more sensitive than extensoral surfaces. Irritants applied to the skin before or after irradiation definitely increase the response to irradiation.

In the investigation of our series of patients we have noted several frequently repeated causes for these untoward results.

#### Patient

In many instances the patient fails to tell his physician of previous irradiation to a certain lesion or area. This may be through pure carelessness on the part of the patient but more usually it is deliberate. One typical patient of this group is illustrated by the following case.

*Case 1.*—A. J., aged sixty, had had a recurrent nummular eczema of the hands for twenty years. This had responded well to small doses of x-ray for some years. His dermatologist finally refused to use more x-ray therapy since he knew the skin had already received all that could be safely given. He then consulted several other dermatologists, each of which had given him a few treatments, but all finally refused further treatment, realizing that his skin was dry, slightly atrophic and feared further radiation damage. He finally found a radiologist who continued therapy until a marked radiodermatitis developed. This patient would not go to the trouble of proper local and systemic care in the hands of a competent dermatologist but sought the easy way of periodic radiation until irreparable damage was done (Fig. 1). Such patients purposely minimize the number of previous treatments to assure the continuation of an easy method of treatment.

#### Dermatologist

Dermatologists are responsible for some of these cases, and the most frequent causes for too much treatment in any case are, first, inaccurate records of dosage and areas treated; second, overoptimism in the care of a patient.

An illustrative case is that of a nurse, A. W., aged twenty-three, who had had x-ray therapy for acne vul-

garis and had responded well. However, treatment had been started at sixteen years of age, and she had had periodic recurrence during the following six years. She responded nicely to subsequent short courses in which smaller and smaller doses were given; however, she eventually developed the radiodermatitis shown (Fig. 2).

This illustrates a pernicious habit of some physicians who feel that doses of x-ray as small as 25 r to 40 r units given at sufficiently long intervals produce no cumulative effect.

A safe rule to follow is that an acne patient should never receive more than twelve to sixteen treatments of 75 r units no matter over how long a time the treatments are spaced. Of course, no single course should be this intensive.

### Radiologist

The most frequent cause of radiation damage in patients who had been treated by a radiologist was the treating of patients with a machine ordinarily used for radiographic examination.

The x-ray factors used in taking x-ray films of extremities, viscera and more especially the chest use a technique in which the milliamperage is 50 to 300 or 500, while most fluoroscopy and x-ray therapy is set up on standard techniques using 3 to 6 milliamperes. Thus a radiologist has been doing chest x-rays at 200 milliamperes; a surgeon brings in a patient with a recently set fracture and asks his friend the radiologist to take a quick look at it with his fluoroscope. In taking this quick look the radiologist fails to change the milliamperage and the patient receives forty times as much radiation as the radiologist believes.

This is illustrated by the case of Mrs. J. A. L., aged twenty-six, who had a small metal splinter removed from the right index finger. The fluoroscope was used for only a few minutes; however, she developed a severe reaction in which the epithelium was entirely lost, and eight months were required for regrowth. The result was a sclerosed, stiff index finger in which recurrent loss of patches of epithelium has been a constant nuisance. Eventually the amputation of the finger will be necessary.

### Technical

Technical errors and carelessness are a frequent cause of radiation damage. The most common of these is the omission of a filter. A certain technique is set up for a treatment in which a filter was to be used. If this filter is omitted through carelessness or ignorance, the dose given will be two to ten times that which is expected. A 1-millimeter alumi-

num filter ordinarily decreases the tube output by half in the usual techniques of superficial therapy.

Failure to measure distance correctly is another



Fig. 2. Radiodermatitis following injudicious x-ray therapy in acne vulgaris.

main cause of error, since the effect varies inversely as the square of the distance. Thus any decrease in the target-skin distance greatly increases the effect.

Other minor causes of error are carelessness in the regulation of the kilovoltage, time, et cetera.

Most of these errors have occurred in small installations where the same x-ray machine is used for taking films, doing fluoroscopy and superficial therapy. In larger organizations, where separate machines are used for these various purposes, errors of these types are less apt to occur. Thus a physician using x-ray in his own general practice or in a small hospital must be even more careful and alert to check all factors in the required technique than one who has a separate machine for the special type of work required.

### Clinical Picture

In a certain area which has received a dose of radiation only slightly above the erythema dose, the first reaction will be noted in seven to ten days with erythema and slight edema. This will subside over a period of several weeks and will show as a residual effect hyperpigmentation which will last a few months. If the area treated has been small there



may be no permanent damage. However, if a large area has thus been treated, months to years later ectatic vessels will develop, the skin will be dry, atrophic with little or no oil or sweat gland secre-

tive dose has been exceeded, the picture, as seen in the late effects of the above erythema dose, will be seen in months or years.

When a dose of large proportions, exceeding



Fig. 3 and Fig. 4. Marked ectases of pubes and deep sclerotic avascular ulcer over sacrum following x-ray therapy of a pelvic malignancy.

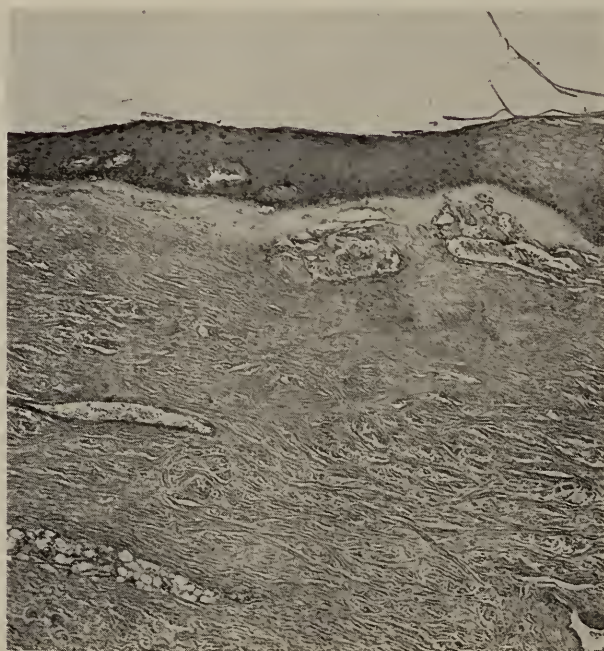


Fig. 5. Note the homogenization of the connective tissue, the marked thinning of the epithelium and the complete loss of skin appendages. X 200.

tion, and in later years keratoses of the senile type probably will develop.

In those cases in which no erythema has ever been produced but in which the total safe cumula-

1,000 to 3,000 roentgens, is administered to an area, there are marked erythema and edema which develop in five to ten days; following this the epithelium will desquamate, and there will remain an

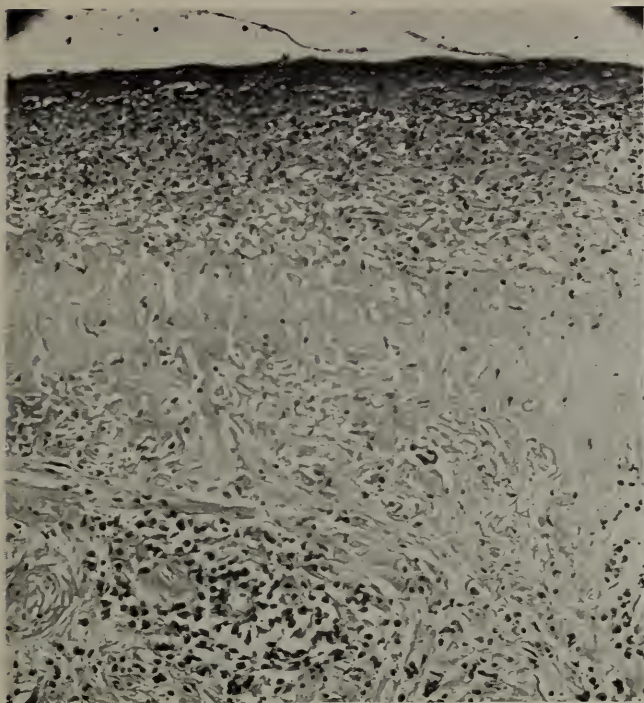


Fig. 6. Note extreme sclerosis of the entire section with dilated superficial vessels and areas of parakeratosis in the epidermis. X 200.

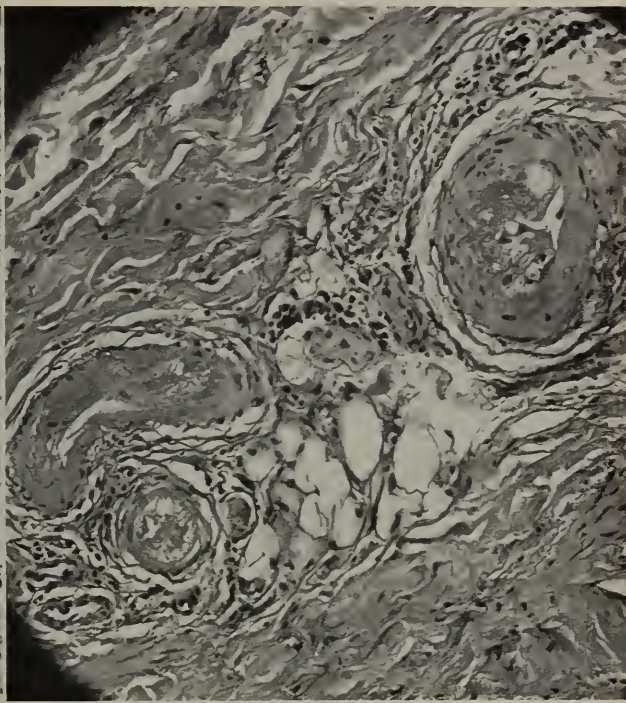


Fig. 7. Note the fibrosis, thickening and occlusions of both artery and vein. X 330.

oozing, crusted, edematous area which will gradually dry down and heal over in four to eight weeks. If the treated area is larger than 2 or 3 centimeters in diameter, the area may require months to heal, and when healed will be very firm and sclerotic.

When areas are treated with larger doses, the edema and slough are proportionately deeper and slower in healing.

### Pathology

In the stage of erythema and edema a microscopic section shows little specific character. There is edema in the upper cutis, both intracellularly and extracellularly. There is a flattening of the rete pegs and a separation of the epidermis from the dermis in some areas. The cells of the vessel walls show a slight homogenization, and some fibrotic and proliferative changes are noted. The infiltrate is composed of lymphocytes and polymorphonuclear leukocytes and is general throughout the section. Later on there is a marked increase in melanin pigment.

The picture of chronic radiation dermatitis is essentially the same whether produced by a single or multiple doses, whether produced by radium, x-ray therapy, fissionable material or as a result of radioscopy. The fundamental pathologic change is that of fibrotic thickening of vessel walls in the

deeper cutis with contraction of the fibrous tissue producing occlusion. The process in the vessels involves all layers of the vessel wall so that an arteritis or phlebitis is produced which is replaced by fibrous tissue. The collagen bundles become homogenized and later become broken up and fragmented. Nuclei disappear and there is little or no inflammatory reaction. The epithelium may be very thin; other areas may show hyperkeratosis and parakeratosis. The pigment is also noted to be in patchy islands. The accessory skin structures are completely lost in all but the mildest cases of radiodermatitis. In some mild cases, even though all sebaceous and oil glands have disappeared, a few damaged hair follicles may remain.

When ulceration occurs in these areas, study will show the complete occlusion of vessels supplying the area. Thus our clinical finding will reflect the loss of blood supply and normal nutrition to an area, and our therapy must be based on this fundamental premise (Figs. 5, 6 and 7).

### Therapy

Since our brief review of the histopathologic findings has shown that the ultimate effect in radiodermatitis is to produce an area which has not sufficient nourishment for normal life, our treatment must be based on this hypothesis.



In acute radiodermatitis during the stage of edema and erythema, cool, wet compresses of saline or boric acid will be soothing, keep the area clean and promote return to normal. Nothing stimulat-

cent, in various bases will help to exclude the damaging effects of actinic rays.

These areas must be examined periodically. Dry keratotic papules should be excised or destroyed



Fig. 8. Note the changes illustrated above plus an irregular parakeratosis and hyperkeratosis; in the center the rete pegs are developing an irregular basement membrane, the epithelial cells are invading the chorium, and a definite squamous cell carcinoma is developing on an area of radiodermatitis.

ing should be used at this time, and the very simplest emollients such as cold cream should be used with the compresses.

In more extensive, deep and painful areas, compresses may be supplemented by the use of aloe vera leaves or ointment, and in some chlorophyll wet dressings and ointment have been very helpful.

The relief of pain in deep ulcers is a very trying problem, and in some the use of topical anesthetics such as surfacaine have been helpful; however, in most, simple cool compresses and the mildest of emollients are usually best.

The use of Thorium-X and ultraviolet light have been recommended in the past. In our experience neither were of help in any case, either of acute or chronic radiodermatitis.

The atrophic dry areas should be protected from sun, wind, weather and chemical irritation. Here, simple protective creams are usually best. The iron pigments in equal parts of ointment of zinc oxide and Lassar's paste make an effective heavy protective covering which can be made up to match the skin color. Such preparations as "Covermark" are often helpful, and phenyl salicylate, 10 per

cent, in various bases will help to exclude the damaging effects of actinic rays. Areas which ulcerate should be treated conservatively for only a few days, and then, if no healing is seen, they should be excised. The tissue removed should always be examined microscopically since these areas commonly degenerate with the formation of prickle cell or squamous cell carcinoma. When these are formed the only safe treatment is wide surgical excision (Fig. 8).

Frequently when large areas have been damaged by radiation, a large patch is formed showing atrophy and ectasia at the borders with an ulcer which fails to heal at the center. In some, healing occurs but breaks down repeatedly. Here, we know we have an occlusion of the vessels to the point that the nutrition is inadequate to support a normal repair. In all these, wide excision and skin grafting are necessary and should not be postponed but done as soon as we are sure that no more regeneration will occur.

In cases of malignancy in which extensive radiation is to be used, it might be advisable to have

(Continued on Page 479)

# Skin Metastases as Evidence of Visceral Malignancy

## Report of Two Cases

By Kenneth M. Vander Velde, M.D.  
Kalamazoo, Michigan

ALTHOUGH METASTATIC growths in the skin have long been regarded as a late manifestation of tumors, they may at times be the only presenting signs, appearing before the primary growth is recognizable. Gates<sup>2</sup> points out that skin metastases appear more often than has been thought as the first manifestation of malignancy elsewhere. Montgomery<sup>6</sup> reports two such cases which were misdiagnosed sebaceous cysts of the scalp before the primary gastrointestinal lesion was recognized. The incidence of skin metastases, as reported from various sources, ranges between 0.01 and 2.7 per cent of all malignancies. These figures would undoubtedly be higher with more biopsy and post-mortem material from skin lesions. Approximately half of the instances reported have been from breast malignancy. The incidence of skin metastases from other than carcinoma of the breast is small. The higher occurrence rate in breast malignancy has made skin lesions or growths in and about the breast highly suspect, while those remotely situated have been lightly dismissed as benign or harmless.

Exclusive of the breast, the stomach is believed to produce more skin metastases than any other organ. These metastases are often localized about the umbilicus where they have appeared as emissaries of an otherwise latent stomach lesion.

Arkin and Waggoner<sup>1</sup> found metastases to the skin in 10 per cent of seventy-four autopsies showing carcinoma of the lung. A number of cases of primary bronchiogenic carcinoma have been diagnosed first by biopsy of the skin where the first symptom of the disease was found.<sup>9</sup> The uterus, large bowel, kidney, ovary, esophagus, liver, and bladder should also be included among those organs from which skin involvement may occur. One case stemming from a carcinoma of the trachea has been reported.<sup>5</sup> The discrepancies in the figures reported by various authors concerning the relationship between skin and organ lesions have been explained by Gates<sup>2</sup> as due to the frequent

failure to recognize or diagnose a metastatic carcinoma of the skin.

## Characteristics of Skin Metastases

As previously stated, the essential characteristics of skin metastases are far from significant and not conducive to accurate recognition. Generally the lesions are firm, nontender, discrete, and freely movable. They are often oval and vary in size from 3 to 15 millimeters, rarely larger than 3 to 4 centimeters. They usually arise one by one, giving the impression of "popping out." The sudden appearance of one or two small nodules on the abdomen is quite characteristic, and the first is often followed in a few days by the sudden appearance of others. Few smaller than a pea are seen and their rapid enlargement gives the patient the impression of their "popping out." Solitary nodules are rare and ulceration is unusual. Although more often than not they occur in groups, they may be seen singly, reach the size of a hen's egg, and be present for a considerable length of time before others appear. The sudden appearance of a crop of nodules signifies hematogenous, rather than the more common lymphatic, spread.\* Schwartz,<sup>7</sup> reports a case of hematogenous spread from adenocarcinoma of the stomach which produced literally hundreds of lesions on the upper half of the trunk.

The skin of the abdomen and thorax is most commonly involved, but spread may occur to other regions as well as over the entire body. (Stein and Hantsch<sup>8</sup> reported a case of adenocarcinoma of the rectum in which the penis alone was studded with numerous metastatic nodules.)

Skin metastases should be suspected whenever there is a history of sudden appearance of one or more nodules, and biopsy is indicated to determine their true character.

A review of our records for the past five years discloses eleven cases of skin metastases other than those from the breast. Five of these were primary in the lung, two in the ovary, one in the thyroid, one in the right colon, one in the rectosigmoid, and one in the rectum. None were of gastric origin. Two of the more interesting and illustrative cases are reported here:

## Case Reports

*Case 1.*—G. A., a white man, aged forty-four, entered Harper Hospital July 10, 1941, complaining of loss of

From the Department of Surgery, Harper Hospital, Detroit, Michigan.

\*The reader is referred to the works of Handley<sup>4</sup> and Guzuki<sup>3</sup> for a discussion of the mode of spread.



weight during the previous six months and an occasional pain in the left lower quadrant of the abdomen for the last three months. There had been no melena. For three weeks anorexia was marked and weight loss and pain had become increasingly severe. During the past five weeks the patient had noticed the appearance of a number of small raised nodules one at a time on the skin of the abdomen and chest.

The physical examination was essentially negative, except for the presence of several freely movable nodules on the chest and abdomen. These were similar in appearance to small fibromas. The largest was  $\frac{1}{2}$  centimeter in diameter. One of the larger was present on the abdomen near the navel, one on the right side of the chest a few inches below the nipple, and the largest in the skin of the left axilla.

The blood picture presented nothing unusual. The urine was normal and the blood chemistry was within normal limits.

On the fourth day of hospitalization, sigmoidoscopy revealed a large friable mass in the region of the rectosigmoid. A biopsy specimen was obtained, and at the same time one of the skin nodules was removed. The nodule showed "advanced colloid carcinoma, primary in the gastrointestinal tract." The rectal biopsy showed advanced adenocarcinoma of the rectosigmoid.

Subsequent exploration revealed a large mass in the rectosigmoid with spread to adjacent glands, omentum, and mesentery. The entire parietal peritoneum was studied with the same type of nodule.

Seven days postoperatively, a metastatic lesion was found in the scalp, and every two or three days new metastases appeared on the skin of the abdomen and chest. One was even found in the skin of the left lower eyelid.

On the twentieth postoperative day, the patient began to cough and exhibited considerable difficulty in breathing. He went downhill rapidly, and expired on the twenty-second postoperative day.

#### *Post-Mortem Anatomic Diagnosis.*—

1. Carcinoma of the rectosigmoid.
2. Metastasis to the organs of the chest and abdomen and to the skin.
3. Atherosclerosis.
4. Benign hypertrophy of the prostate.
5. Recent colostomy.
6. Fibrinous and fibrous adhesions of the pleura.

*Comment.*—This case represents an instance of skin metastases from a carcinoma of the rectosigmoid in which the skin changes appeared before the local signs were entirely manifest. Early skin biopsy could have offered valuable information.

*Case 2.*—Mrs. E. B. was first seen September 9, 1945, because of a small tumor mass which had been present on the abdomen for three weeks. Previously, she had been seen on numerous occasions for vague abdominal complaints, all referable to the upper abdomen and stomach.

Examination at this time revealed a small freely movable nodule beneath the skin of the left abdomen four

centimeters to the left of, and two centimeters below, the umbilicus, and an intra-abdominal mass the size of an orange in the right lower quadrant. Pelvic examination was negative, and a barium enema revealed an annular neoplasm involving the upper ascending colon. The possibility that the small nodule was a metastatic lesion was entertained, but biopsy was not done.

When laparotomy was performed, there was an inoperable lesion of the right colon with multiple metastases to the liver. An ileotransverse colostomy was done as a palliative procedure. A biopsy specimen showed "advanced metastatic adenocarcinoma of a lymph node."

During the subsequent five weeks, a number of metastatic nodules appeared in the skin, four in the lower abdomen and pubic area, four in the epigastrium, one in the right supraclavicular fossa, and one on the left anterior thigh.

*Comment.*—Had biopsy of the first nodule been performed in this patient two months prior to laparotomy, it would have disclosed an advanced state of malignancy, and, although the short-circuiting operation was not without merit, its performance may have been unnecessary.

### Summary

Because the incidence of skin metastases from primary neoplasms is probably greater than available statistics reveal, any skin nodule of comparatively recent appearance should be removed and examined microscopically. By adhering to this rule, evidence of a primary malignant lesion existing at a subclinical level may be uncovered.

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Emphasis will be placed on the ideals of the American medical profession. Certainly the American people should know that compulsory sickness insurance is not a technique for providing free medical care to all of the people, but instead a system whereby the workers of the nation are taxed to support a vast bureaucracy which itself will distribute medical care and which will be the intervening agency between the sick and the medical, hospital, pharmaceutical, nursing, and allied professions. —Editorial, *JAMA*, December 25, 1948.

# Splenic Neutropenia Associated with Hodgkin's Disease

By John D. Kutsche, M.D.

Detroit, Michigan

IN 1939 Wiseman and Doan<sup>2</sup> reported five cases characterized by a syndrome which they called primary splenic neutropenia. After further observation of these original cases, the same men<sup>3</sup> discussed this interesting syndrome in more detail in 1942. Primary splenic neutropenia is believed to be closely related to thrombocytopenic purpura and to hemolytic icterus. In thrombocytopenic purpura, the action of the spleen is directed primarily against the platelets; in hemolytic icterus its action is against the erythrocytes, but in primary splenic neutropenia the spleen's action is against the neutrophils. One can easily see, however, where there could be frequent overlapping in the clinical characteristics and the laboratory findings of these three syndromes.

The diagnostic criteria as summarized by Langston et al<sup>1</sup> are:

## A. Clinical

1. Splenomegaly.
2. Occasional purpura. (thrombocytopenic)
3. Occasional oral ulceration. (neutropenia)
4. Icterus, mild. (hemolysis)
5. (To this list should be added frequent superficial infections as a result of the neutropenia.)

## B. Hematological

1. Bone marrow
  - a. Hyperplastic for myeloid series.
  - b. No abnormal cells.
  - c. Not leukemic.
2. Blood
  - a. Marked specific neutropenia.
  - b. Anemia (macrocytic, hyperchromic)
  - c. Reticulocytosis.
  - d. Increased serum bilirubin. (depending upon the degree of anemia)
  - e. Thrombocytopenia. (variable)

The following case is reported because of the interesting coexistent diagnoses of Hodgkin's disease and splenic neutropenia.

M. J. G., male, white, aged thirty-five, was first seen at the Henry Ford Hospital on October 12, 1928 for repair of an inguinal hernia. At that time the hemoglobin and red blood cell levels were within a normal range.

He was next seen on October 13, 1941, complaining of a mass in the left femoral region. The patient was urged to have a biopsy of these nodes, but he preferred to defer this procedure. The blood count at this time was reported as follows: Hemoglobin 15.6 gm.; red blood cells, 5,110,000; white blood cells, 8,000; neutrophils, 64 per cent, lymphocytes, 34 per cent and monocytes, 2 per cent.

On September 27, 1944 all the involved glands, bilaterally, were removed by a local surgeon. These sections were reviewed by members of our Pathology Division who agreed that the histopathology was compatible with a Hodgkin's syndrome. All of the laboratory reports at this date were within normal range.

The patient was admitted to the Henry Ford Hospital on June 8, 1945 with a severe cellulitis involving the right side of the face. The hemoglobin level at this time was 12.7 gm. with 4,060,000 red blood cells. The white blood cell count showed a marked leukopenia of 800 with 24 per cent neutrophils, 74 per cent lymphocytes, 1 per cent eosinophils and 1 per cent monocytes. The platelet count was 190,000. The patient was treated at this time with penicillin, liver injections, and pent-nucleotide. The infection responded very well to therapy, but the blood count levels remained unchanged.

The patient was followed carefully in the Out Patient Department with repeated blood counts showing the white blood cell count to remain around 800 with about 10 per cent neutrophils and 90 per cent lymphocytes. Pyridoxine therapy was begun on July 23, 1945. He was given 125 mg. of Pyridoxine hydrochloride intravenously for twenty-one days, and then twice a week for six weeks. There was an apparent response of the total white blood cell count to 1,800, but no apparent response of the neutrophils.

On October 24, 1945 he was again admitted to the hospital for treatment of an acute pharyngitis, pharyngeal abscess, and an abscess of the right lower molar tooth. The blood findings were essentially unchanged. The patient again responded very well to therapy regarding the infections, but the white blood cell count remained low.

The spleen was palpable for the first time on December 3, 1945. There were a few small cervical and inguinal glands palpable at this time also, but no evident progression from previous examinations. The liver was not palpable.

A sternal bone marrow examination on December 3, 1945 showed hyperplastic changes, but predominantly erythroid. There was an eosinophilia present. The bone marrow also showed an increase in the normal small lymphocytes, scattered plasma cells, a relative and absolute myelopenia without a left shift, normal developing red blood cells and megacaryocytes impinged upon by abnormal reticulum cell elements. These findings would indicate the same pathological process to be taking place in the bone marrow as in the lymph glands earlier in the disease.

On March 14, 1946 a complete work-up preparatory to surgery showed the physical examination to be within normal range except for the enlarged spleen, palpable



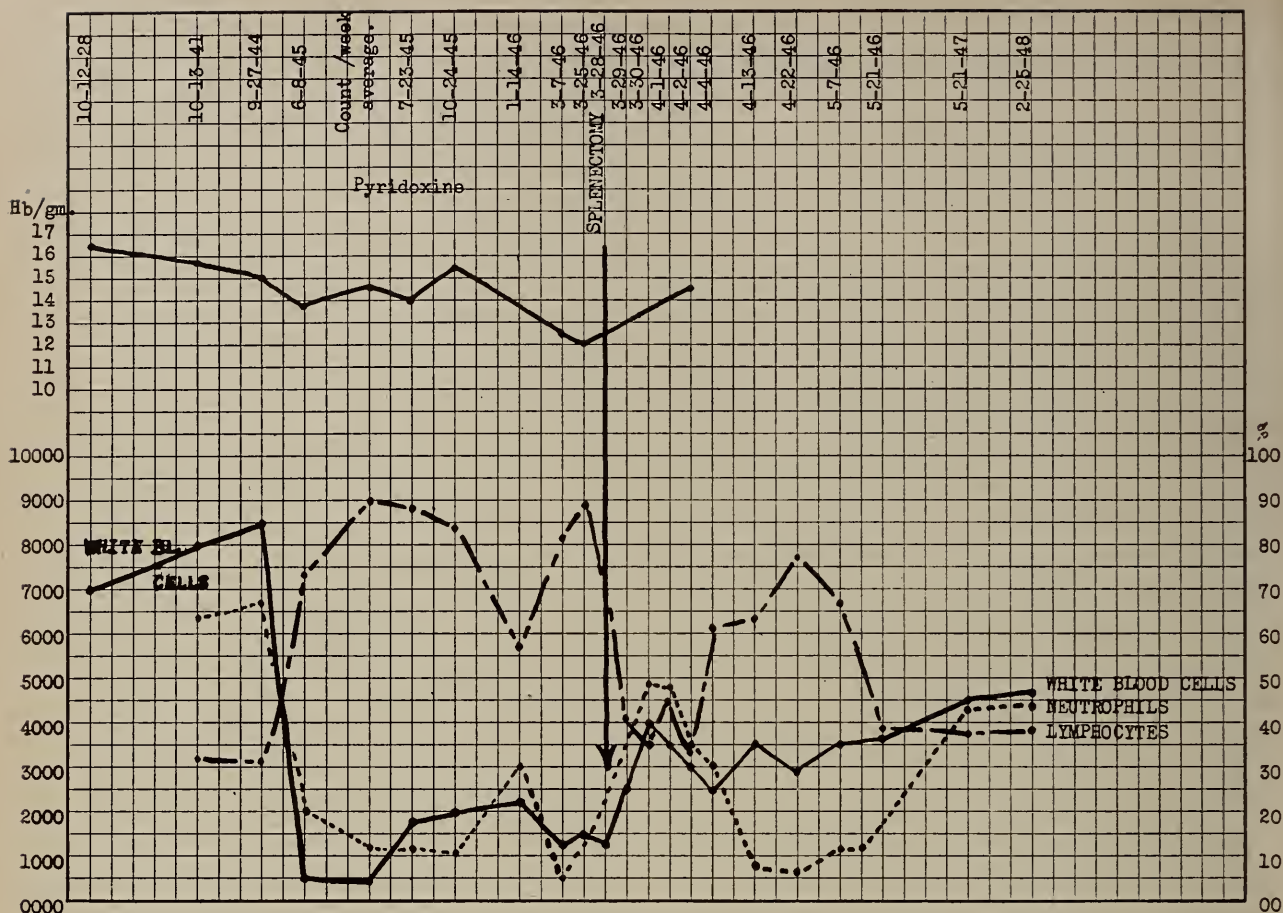


Fig. 1.

2 to 3 cm. below the left costal margin in the anterior axillary line. One cubic centimeter of adrenalin in 1-10,000 was given subcutaneously with the initial count 1,150; at the end of forty minutes the total white count was only 1,750.

The patient was seen by Dr. C. A. Doan in consultation. His findings were essentially as stated above. Although this case failed to give the clear picture of a primary splenic neutropenia, he felt that splenectomy might be of value.

Splenectomy was performed on March 27, 1946. The microscopic sections of the spleen showed changes compatible with a diagnosis of early splenic Hodgkin's disease. Just prior to surgery the white blood cell count was 1,400 with 5 per cent neutrophils, 5 per cent eosinophils, 6 per cent monocytes, and 84 per cent lymphocytes. On March 28, 1946, the white cell count was only 1,100, but the differential now showed 42 per cent neutrophils and 54 per cent lymphocytes. On March 29, 1946, the white count was 2,500 with 48 per cent neutrophils. On March 30, 1946, the white count rose to 3,500 with 49 per cent neutrophils. On April 4, 1946, the white blood cell count had dropped to 2,650 with 32 per cent neutrophils. Progress blood counts at intervals showed no great change in the blood count levels.

The patient has been followed in the out-patient de-

partment. He has returned to work and has been enjoying good health. The last blood count was done on February 25, 1948 at which time the count showed 4,400 white blood cells, with 46 per cent neutrophils, 1 per cent eosinophils, 17 per cent monocytes, and 36 per cent lymphocytes. There has been no apparent progression of the Hodgkin's disease from the clinical viewpoint.

### Comment

It was felt that this patient had a granuloma (of the Hodgkin's variety) involving the lymph nodes, bone marrow and spleen. However, his clinical course made one suspect the presence of other complicating factors. Since the Hodgkin's disease was already generalized, the value of performing a splenectomy for the leukopenia present demanded careful consideration. It was felt that both the decreased myelopoiesis in the bone marrow and the splenic destructive action were playing roles in this case. Since this patient was so susceptible to superficial infection, it was imperative that he be given every aid possible to resist infection.

(Continued on Page 484)

# Unusual Spinal Cord Tumors

By Carl F. List, M.D., F.A.C.S.

Grand Rapids, Michigan



**I**N FEW conditions is early diagnosis more important than in spinal cord tumors. Rapid and complete recovery may be achieved by surgical treatment, provided these lesions are recognized at an early stage; but protracted, or even permanent, disability may result from too late a diagnosis.

As physicians have now become more cognizant of neurosurgical problems, the presence of a spinal cord tumor is usually suspected when a patient exhibits evidence of nerve root irritation combined with, or followed by, slowly progressive paraplegia. Unfortunately, this classical symptomatology is not always encountered.

Many diagnostic pitfalls must be avoided in incipient and atypical cases. The pain may be the first or only symptom of a cord tumor, and precede for years objective neurologic findings. Its radicular nature may not be too characteristic and, therefore, its origin may remain unrecognized. It is a common experience for every neurosurgeon that pains due to cord tumor had been misinterpreted as signs of arthritis, coronary disease, pleurisy, cholelithiasis, gastric ulcer, appendicitis, or nephrolithiasis. The characteristic features of root pain are its segmental distribution; its sharp, shooting, or sometimes paresthetic, "electric" character; and its elicitation by acts raising the venous and intraspinal pressure (coughing, sneezing, straining).

When a gradually progressive spinal cord syndrome develops with little or no pain, even an experienced observer may too readily dismiss the possibility of a cord tumor and incorrectly diagnose the condition as myelitis of unknown cause, posterolateral sclerosis, or multiple sclerosis. It is worthy of mention that intramedullary neoplasms and extramedullary growths situated anteriorly to the cord often cause no pain.

Spinal cord tumors in children, particularly those of congenital nature, present, frequently, difficult diagnostic problems. In early infancy, the

unreliability of history and sensory examination deprives the clinician of important diagnostic information. Congenital tumors which occur in the younger age group tend to develop very slowly and impair only slightly the functions of the compressed cord. Their clinical manifestations, therefore, may remain amazingly inconspicuous and uncharacteristic.

Considering the wide variations of symptomatology, one should always think of the presence of a spinal cord tumor if a patient complains of chronic segmental pain which is not accounted for by any other disease, or if the patient presents the signs of an etiologically obscure, progressive spinal cord disorder. The diagnosis of cord tumor must be ruled in or out by the following investigations:

1. A careful neurologic history and examination are mandatory. The examination should be repeated several times, especially after lumbar puncture, since this procedure occasionally increases the neurologic signs.

2. Roentgenograms of the spine in at least two projections are essential. One should not omit scrutinizing finer details, such as the appearance of and the distance between the pedicles.<sup>2</sup>

3. Lumbar puncture with careful manometric reading and adequate examination of the spinal fluid must be done (including a quantitative determination of the total protein).

4. If the results of the above studies still leave some doubt as to the site and (possibly compressive) nature of the cord lesion, myelography is definitely indicated. Even when a presumptive localization of the lesion has been made by clinical means, myelography may be useful to confirm the diagnosis. It must be mentioned here that the neurologic level is not always reliable and, as a rule, the lower pole of a very long cord tumor cannot be accurately determined by clinical examination. Since both lumbar puncture and myelography may aggravate the patient's condition in cases of cord tumor, it is advisable to have these procedures carried out as the last diagnostic step and only where immediate neurosurgical facilities are available. Moreover, myelography requires experienced and critical interpretation if one wants to avoid a high margin of false "positives" and "negatives."

In the following three illustrative case reports, the problems of diagnosis and management of unusual spinal cord tumors will be discussed in detail.



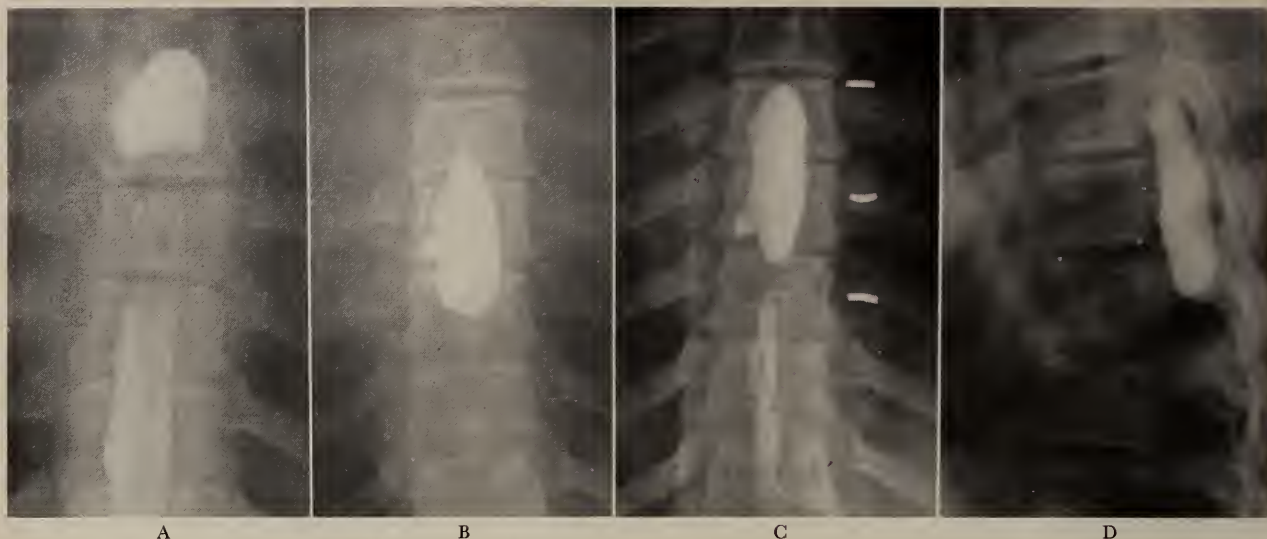


Fig. 1. Case 1. Communicating extradural cyst. D4-D7. Myelograms.

- (A) AP film, head down. Pantopaque in subarachnoid space below lesion. Upper pole of partially filled cyst shown.  
 (B) AP film, head up. Lower part of cyst filled with pedicle near left 6th thoracic root.  
 (C) AP film, horizontal. Nearly entire extent of cyst with pedicle at D6 shown. Lower pole indicated by fine crescentic line of pantopaque, contrast medium in subarachnoid space below lesion.  
 (D) Lateral film showing filled cyst.

### Mid-dorsal Extradural Spinal Cyst

*Case 1.*—B. C., colored, female, aged twelve, was referred by Dr. Ralph Barris, Grand Rapids. She was admitted to Blodgett Hospital (No. 88013), December 14, 1947, discharged January 3, 1948.

*History.*—For approximately one year, the patient noticed gradually progressive weakness and stiffness of both legs, associated with slight sensation of numbness, but without pain. Lately, increasing difficulties of micturition developed. The patient gave no history of other neurologic symptoms, trauma, syphilis, tuberculosis, or other infections.

*Examination.*—On neurologic examination, there was severe symmetrical spastic paraparesis of both lower extremities and of abdominal muscles. The patient was barely able to make a few shuffling steps with bilateral support. The heel-to-knee test could not be performed, due to spasticity and weakness. Knee and ankle reflexes were exaggerated, and the signs of Babinski and Rosolimo were elicited bilaterally. The abdominal reflexes were absent, except for faintly preserved epigastric reflexes. There were mild hypalgesia, tactile and thermic hypesthesia below the sixth dorsal segment bilaterally. Vibratory sensation was diminished below this level, and the ability of recognizing numbers written on the skin completely abolished; position sense of the toes was moderately disturbed. The patient had a neurogenic "spastic reflex" bladder. The spine showed no deformity, limitation of movement, nor local tenderness. Naffziger's test was negative.

X-rays of the dorsal spine revealed a localized erosion of the pedicles of D5 and D6, with enlarged interpedicular distance.

On the basis of history, clinical, and roentgenologic findings, the tentative diagnosis of spinal cord tumor at D5 and D6 was made, and the possibility of extradural cyst was suspected.

Lumbar puncture revealed almost total manometric block. The spinal fluid was clear, colorless, containing only two lymphocytes, but a total protein of 158 mgm. per cent. Subsequent lumbar myelography showed, on lowering of the head end, a partial block with a tapering oil column at the level of the seventh dorsal vertebra, and a little later a total stop at the level of the fourth dorsal vertebra. The contrast medium formed at this level an unusually wide blob with a convex cranial pole (Fig. 1, A). When the position of the patient was reversed, and her feet lowered, a large mass of contrast medium stopped completely at the level of the seventh dorsal vertebra, forming an ovoid mass with convex lower pole (Fig. 1, B). There was a small out-pouching on the left side of the mass at the level of the sixth intervertebral foramen. Furthermore, a fine linear streak of contrast substance was seen slightly caudad and parallel to the lower pole of the main mass of oil (Fig. 1, C). In the lateral projection, the ovoid mass appeared at a more posterior plane than the contrast medium remaining below (D8) in the subarachnoid space (Fig. 1, D).

These unusual findings were interpreted as follows: When the oil flowed up, it encountered at first a partial block at the seventh dorsal vertebra by the compressive lesion above this level, then it passed through a small pedicle (the little out-pouching at the sixth intervertebral foramen) into a large extradural sac where it became trapped. The cystic cavity was ovoid in shape and extended, on the posterior surface of the cord, from the lower border of the fourth to the upper border of the seventh dorsal vertebra. It was concluded that this lesion was an extradural cyst communicating with a subarachnoid space, in other words, an extradural diverticulum. After myelography, the patient's motor and sensory disturbances increased in severity.

Operation was performed by the author on December 17, 1947, confirming the above diagnosis. By means of a laminectomy from D4 to D7 a grayish, smooth, glisten-

ing, extradural cyst of 6 cms. length was exposed, compressing the posterior surface of the dura (Fig. 2, A). Separation of the cyst from the dura was easy, except at the level of the left sixth thoracic nerve root. Just caudad

own observation. Spinal extradural cysts usually occur in the mid-dorsal region of adolescents. A slowly progressive spastic paraplegia develops

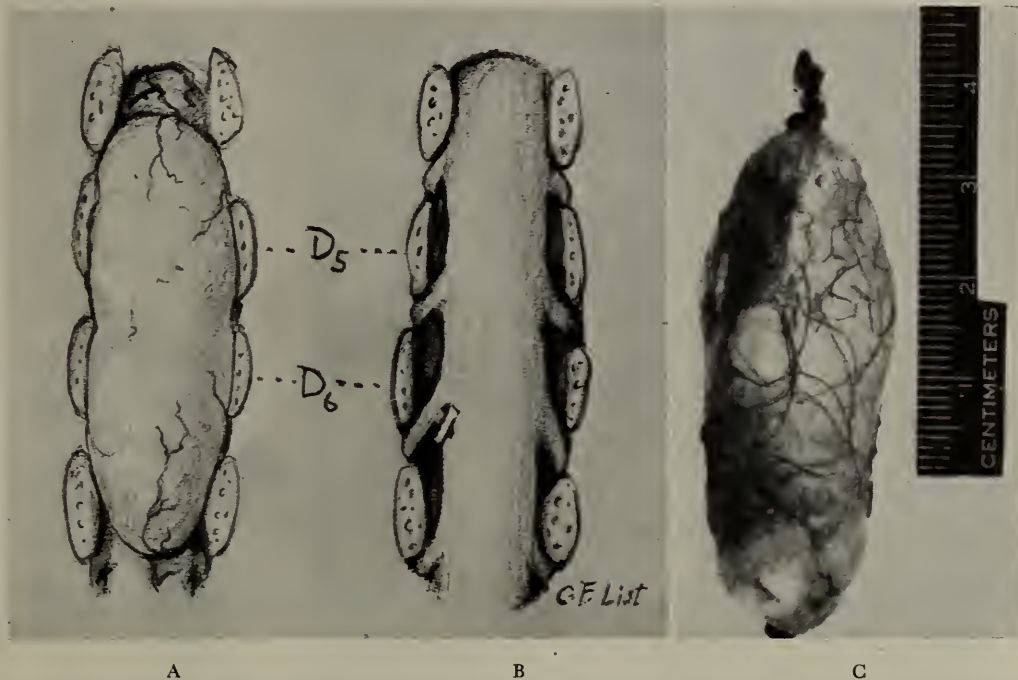


Fig. 2. Case 1. Operative findings. (A) Operative sketch of exposed cyst. (B) Drawing showing dura exposed after removal of cyst. Note silver clip on cut stalk below left 6th thoracic root. (C) Photograph of removed cyst.

to that root a small stalk was seen through which the cyst communicated with the subarachnoid space. After this stalk had been divided between silver clips, the cyst was delivered intact (Fig. 2, B and 2, C). It contained spinal fluid and some residual contrast medium.

On histologic examination, it was found to consist of simple connective tissue without any lining of arachnoid cells.

The postoperative surgical course was uneventful. In the first postoperative days, spasticity of the legs was markedly reduced, and the legs were weaker than before, but within two weeks the tone of the legs increased again with gradual improvement of strength. The patient began to walk with support, showing better strength, but a greater degree of ataxia than before the operation. After one month, she was able to walk quite well with a cane. When seen last, two months after operation, the patient's gait was nearly normal except for a minimal degree of ataxia. Tone and muscular strength were practically normal, and the sensory disturbances were minimal in degree.

**Comment.**—Spinal extradural cyst has been recognized as a clinicopathologic entity by Elsberg and Dyke<sup>3</sup> and Cloward and Bucy.<sup>1</sup> Up to this time, nearly thirty of such cases have been recorded in the literature. The characteristic features of the condition are well exemplified in our

without significant root pain. Sensory changes may be mild and affect predominantly the modalities mediated through the posterior columns. The clinical behavior of these lesions is explained by the fact that they encroach directly upon the posterior columns, yet the compression of the cord remains relatively mild and without root irritation, due to the liquid contents of the cyst and its equalized hydrostatic pressure. The slow development of the lesion leads to local erosion of vertebral pedicles. It is of interest to note that, in many cases, other vertebral changes were observed, such as epiphysitis of the vertebrae (Scheuermann's disease) and juvenile kyphosis. According to Cloward and Bucy,<sup>1</sup> pressure of the cyst may cause impairment of venous blood flow through the involved vertebrae and thus produces the bony changes. In most cases, the extradural cyst communicates with the subarachnoid space through a small stalk, but heretofore this connection has only rarely been demonstrated by myelography.

The cyst presumably develops on the basis of a congenital defect, perhaps from a small congenital arachnoid diverticulum. It gradually enlarges by a ball valve mechanism, forming what might be



called an internal meningocele. In a case recently published by Turner,<sup>6</sup> the cyst, apparently, could be emptied by spinal puncture, with consecutive

admission, moderate pain in the low back developed. Approximately three or four weeks before admission, the patient noted bloody and, later, slightly purulent discharge from a pilonidal sinus in the low sacral area

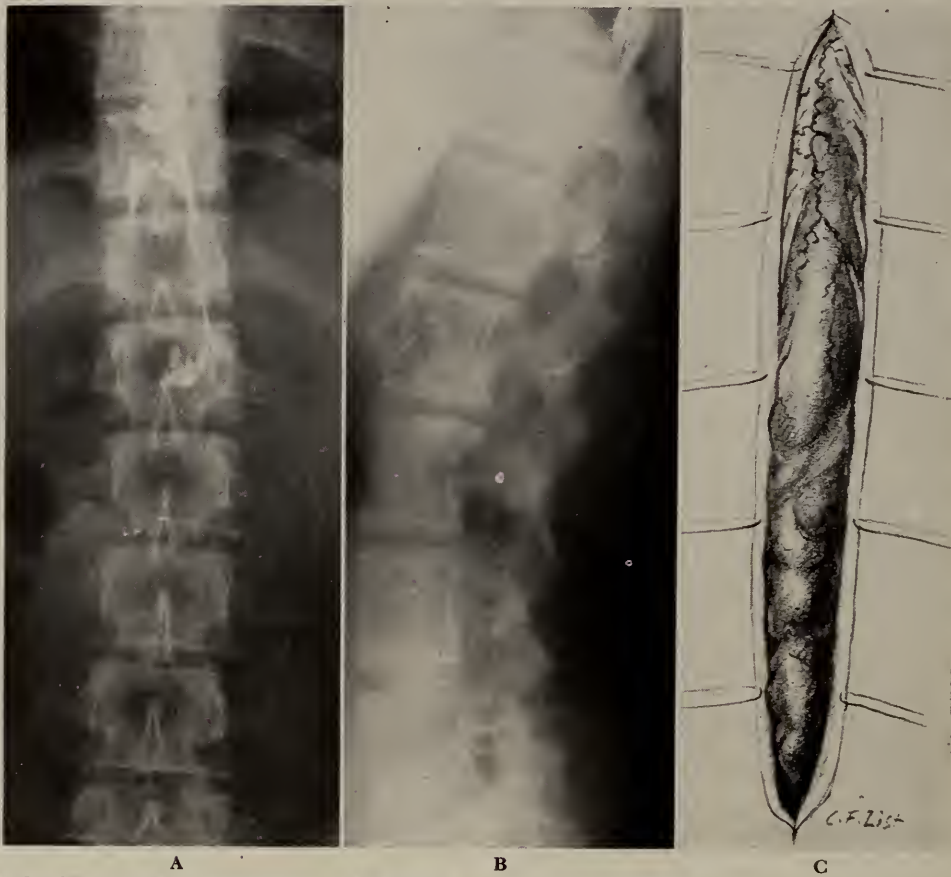


Fig. 3. Case 2. Giant ependymoma of cauda equina. (A) and (B) Myelogram in AP and lateral projections. Note erosion of pedicles in A, and scalloping of vertebral bodies in B. (C) Operative sketch of lesion.

improvement of clinical signs. In other observations, such as ours, the patient became worse after lumbar puncture and myelography, in spite of the roentgenologically demonstrated communication. This supports the idea that a ball valve mechanism is operative in the filling of these cysts.

As far as known from the literature, the prognosis after removal of the cyst is excellent for complete, or nearly complete, recovery of neurologic function in most cases.

### Giant Ependymoma of the Cauda Equina

*Case 2.*—C. O., male, aged seventeen. Referred by Dr. Marvin Meengs, Muskegon. He was admitted to Blodgett Memorial Hospital (No. 88245), December 28, 1947, and was discharged January 18, 1948.

*History.*—Five years prior to admission, the patient experienced pain, radiating from both hips along the posterior aspect of the legs to the feet. There was also some radiation anteriorly to the knees. One year prior to

with reddening of the surrounding skin. The pain in the lumbar region re-appeared at that time and radiated mainly to the left flank, anterior thighs, and knee regions. Similar, though lesser, pains developed on the right side. Three days prior to admission, the patient observed numbness in the region of the anterior surface of the thighs and knees. Urination became difficult, as he had to strain and did not feel the passing of urine; eventually he had to be catheterized.

*Examination.*—Examination revealed the following: The patient was a somewhat stigmatized individual, with a borderline intelligence. He stood with increased lumbar lordosis, slightly splinting the lumbar spine. Flexion and extension of the lumbar spine were limited. There was moderate tenderness to pressure over the entire length of the lumbar spine. A discharging and infected pilonidal sinus was present in the low sacral area. The lower extremities showed minimal atrophy of the right anterior thigh muscles and moderate bilateral hypotonicity, but no demonstrable weakness. Lasègue's sign was positive bilaterally, and there was also pain when the crural nerves were stretched. The middle and lower ab-

dominal reflexes and cremaster reflexes were absent. The knee reflexes were bilaterally diminished, especially on the right; the ankle and plantar reflexes were absent. At one examination, there was questionable hypalgesia below the twelfth dorsal segment bilaterally, and at another examination, there was a mild hypalgesia confined bilaterally to the third lumbar dermatomes. The patient had an atonic bladder with residual urine of approximately 250 c.c.

X-rays of the lumbar spine showed striking widening of the spinal canal with erosion of pedicles and scalloping of the posterior surfaces of the vertebral bodies from L1 to L5 inclusively. These changes were most marked at the level of the second and third lumbar vertebrae, (Fig. 3, A and B).

The diagnosis of a slowly growing cauda equina tumor of unusual size was made. In view of the pilonidal sinus, the presence of an intraspinal dermoid was suspected; ependymoma was considered another diagnostic possibility.

Since the tumor evidently filled the entire lumbar canal, a cisternal myelogram was done. The cisternal fluid was definitely xanthochromic, containing 8,900 red blood cells (artifact) and five white blood cells. Pandy's reaction was 4+, but insufficient fluid was removed to determine the total protein. The contrast medium was almost completely arrested at the level of the eleventh dorsal vertebra, with a small trickle descending on the right side to the level of the first lumbar vertebra outlining the upper pole of the tumor (Fig. 3, A and B).

Laminectomy was done by the author on December 31, 1947 from the eleventh dorsal to the fourth lumbar vertebra, inclusively. The epidural fat was absent. After opening the dura, a dark red tumor was exposed, filling the entire field (Fig. 3, C). The intra-arachnoid growth covered the roots of the cauda and formed an intramedullary extension into the lumbar cord, which appeared to be definitely widened. The friable and vascular tumor was removed piecemeal, but complete extirpation was impossible, since it surrounded all the nerve roots like a cast and was quite adherent to them. The nerve roots appeared to be displaced anteriorly and a little towards the right. The dura was left open for decompressive purposes.

On microscopic examination, the neoplasm exhibited pseudopapillomatous structure resembling, somewhat, thyroid tissue (Fig. 4). Layers of epithelial cells were attached to a core of connective tissue which had undergone myxomatous degeneration. The histologic diagnosis was myxopapillary ependymoma (confirmed by Dr. James W. Kernohan, Rochester, Minn.).

The patient complained of severe postoperative root pain for approximately two weeks. Under penicillin treatment, the pilonidal sinus dried up and the laminectomy wound healed well. At the time of discharge, two and one-half weeks after surgery, all pain had disappeared. The lower abdominal and cremaster reflexes were still absent. The legs showed no weakness and their tone was normal. Knee and ankle reflexes had returned, and there was a suggestive positive right sided Babinski. No objective sensory changes were present, although the patient complained of slight numbness in his left toes.

The patient still had a neurogenic bladder with a residual of 200 c.c., but he could void spontaneously, and there was no evidence of bladder infection. The patient re-

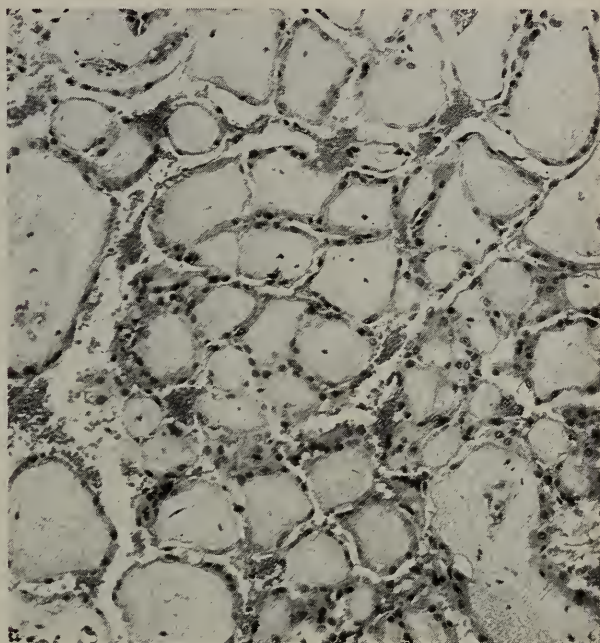


Fig. 4. Case 2. Myxopapillary ependymoma. Microphotograph. H&E stain. Note the resemblance to thyroid tissue.

ceived a total of 1970 R of deep x-ray therapy over his lesion.

When seen last, two and one-half months after the operation, the patient walked normally and showed no disturbance of motor and sensory functions. He stated that he voided normally and without residual, and that his sexual function was likewise normal. Naffziger's and Lasègue's signs were negative. The movements of the lumbar spine were only slightly limited. The deep reflexes of the lower extremities were moderately hyperactive, without pathologic toe signs.

*Comment.*—The unusual feature of this case is the striking discrepancy of a relatively mild clinical symptomatology and the magnitude of the anatomic lesion. This patient presented only a suggestive cauda equina syndrome and, had it not been for the neurogenic bladder and x-ray findings, his lesion might not have been discovered at all. Here again, we deal with a very slowly growing, perhaps congenital, lesion, which in spite of its location within the roots of the cauda produced no gross loss of function, and not even a severe degree of root irritation. The soft consistency of the lesion and its slow growth rate explain the paucity of neurologic signs, yet the tumor possessed sufficiently expansive character to cause considerable erosion of the bony spinal canal.

Pre-operative differential diagnosis was uncer-



tain, in view of the presence of a low sacral pilonidal sinus. It is known that a dermal sinus may extend into the spinal canal and form a large dermoid tumor with clinical and roentgenologic signs identical to those encountered here.<sup>5</sup> On the other hand, the most frequent type of "giant tumor" of the cauda equina associated with enlarged spinal canal is the ependymoma. This neoplasm is glial in nature and originates from ependymal cell rests in the region of the conus or filum terminale.<sup>4</sup> In some of the ependymomas, the connective tissue stroma undergoes curious mucinous degeneration, thus producing a pseudopapillary thyroid-like appearance. Myelography was done by cisternal route, in this case, because it was essential to determine, pre-operatively, the upper level of the lesion (which was uncertain on neurologic examination). A xanthochromic cisternal fluid with a high total protein is an unusual finding in cauda equina tumor. As a rule, such spinal fluid changes occur below the lesion or, perhaps, only in the immediate neighborhood above it; there was certainly no evidence that the cauda equina tumor was a secondary implantation of an intracranial tumor.

Myxopapillary ependymomas are known to be benign lesions with a long survival time, even after partial removal. They usually respond well to simple decompression and subsequent x-ray therapy.

### Paravertebral and Intraspinal Sympathoblastoma in a Newborn

*Case 3.*—W. W., male, aged one month, was referred by Dr. Clarice McDougall, Grand Rapids. He was admitted to Blodgett Memorial Hospital (No. 88524), January 23, 1948 and was discharged January 30, 1948.

*History.*—Delivery was normal, and the baby was able to move his extremities. At the age of two weeks, however, the mother noted the formation of a lump over the lower ribs on the left side close to the spine, and rapidly progressive paralysis of the lower extremities. The baby showed no evidence of pain or loss of weight.

On examination, the baby was well nourished, weighing 10 pounds 7 ounces, and without gross anemia.

There was a bulging, firm, slightly fluctuant mass covered by normal skin, the size of a large plum (6.5 cms. by 6.5 cms.), in the left paravertebral region, overlying the tenth and eleventh ribs (Fig. 5, A). This mass was not tender nor inflamed. Both legs were flaccid and totally paraplegic, but some reflex synergias could be elicited by stimulation of the feet. The oblique abdominal muscles and lower portion of the abdominal recti were, likewise, flaccid and paralyzed. The abdominal and knee reflexes were absent, but the ankle reflexes

increased. There were bilateral Babinski and Rossolimo's signs.

The urine analysis revealed no abnormalities. The blood showed 3.98 million red cells, 12,000 white cells, 89 per cent hemoglobin (13.8 grams). The differential count was 5 eosinophiles, 4 stabforms, 43 segmented neutrophils, 41 lymphocytes, 7 monocytes; sedimentation rate was 50 mms. in one minute, 39 mms. in four minutes, 45 mms. in six minutes, and 60 mms. in eight minutes.

Roentgenograms of the spine showed separation of the eleventh and twelfth ribs on the left by paravertebral soft tissue mass, slight widening of the intervertebral foramina D11 and D12 and questionable structural changes of the corresponding vertebral bodies (Fig. 5, B).

Lumbar puncture showed total manometric block. The fluid was slightly bloody (artifact), but contained only four cells. Myelography with 1/2 c.c. of pantopaque revealed a total block of the spinal canal at the upper border of the second lumbar dorsal vertebra with an upward concave outline (Fig. 5, B).

Needle biopsy of the palpable tumor mass yielded soft, grayish tissue. On microscopic examination, this material consisted of a highly cellular undifferentiated neoplasm with many mitotic figures. The pathologic diagnosis was malignant, undifferentiated neoplasm, presumably neuroblastoma (sympathoblastoma).

It was felt that this tumor was too malignant and extensive to attempt surgical interference. Therefore, deep x-ray therapy was given through three ports totaling 3125 Rs. Check-up examination of February 18 showed that the baby was still in good general condition and had lost no weight. The visible tumor mass of the back had slightly receded (to 5.5 by 5 cms.). There was no change in the neurologic status with the exception that the legs were no longer flaccid, but had become spastic, with a tendency to flexion contracture.

On February 25 the baby had developed considerable anemia: RBC 3,540,000, Hb. 9.1 gm. (59 per cent). WBC 5,050, 48 segmentforms, 2 stabforms, 46 lymphocytes. There appeared slight swelling of the distal portion of the left thigh and on x-ray examination there was evidence of a metastatic bone lesion in the femur with considerable periosteal reaction. A similar lesion developed in the distal portion of the left tibia. Finally, chest x-rays showed a large metastatic lesion in the right lower lung field (Fig. 5, C and D).

From then on, the course was rapidly downhill, and death occurred on March 12, 1948, approximately two months after the onset of the disease.

Unfortunately, no autopsy could be obtained.

*Comment.*—Occurrence of spinal cord tumor in a newborn is exceedingly rare, and suggestive of a congenital origin. In contrast to the preceding two cases, the rapid development of the lesion indicated a high degree of malignancy. Simultaneous development of a palpable paravertebral tumor mass and a transverse syndrome of the cord suggested that the neoplasm originated primarily in

the paravertebral gutter of the adrenal region, and, secondarily, invaded the spinal canal through the intervertebral foramina; the tumor within the

In older children, neuroblastic tumors of sympathetic origin are found in a similar location; that is, in the paravertebral region. They possess a



Fig. 5. Case 3. Paravertebral and intraspinal malignant sympathoblastoma. (A) Photograph of patient with visible tumor mass. (B) Myelogram in lateral projection, showing pantopaque stop at L2 and enlarged intervertebral foramina. (C) Metastatic lesion in left tibia (arrow). (D) Metastasis in the right lung.

spinal canal presumably occupied an extradural position.

In view of the patient's age and the location of the lesion, the diagnosis of an embryonic undifferentiated sympathoblastoma appears most likely; an assumption which is compatible with the biopsy findings.

slower growth rate and sometimes contain areas of calcification visible in roentgenograms.

Mention may be made here of the sensory examination of young children. It is possible to map out roughly the area of analgesia by observation of motor responses to painful stimuli; however, care should be taken not to confuse the nor-



mal reactive and defensive movements with spinal reflex automatisms.

As to treatment, surgical removal usually is impossible. In most known cases, undifferentiated sympathoblastomas have proved unresponsive to x-ray therapy, yet in a few instances temporary improvement has been reported following radiation.

### Summary

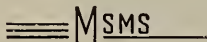
The presence of a spinal cord tumor must be suspected when chronic root pain is combined with a slowly progressive syndrome of the spinal cord. The diagnosis may be difficult when root pain is the only symptom or when signs of a spinal cord lesion are not accompanied by pain. Finally, certain congenital tumors of the spinal cord occurring in childhood or adolescence may cause an atypical and uncharacteristic symptomatology.

Some suggestions are given as to the diagnostic management; the importance of roentgenograms of the spine, lumbar puncture, and myelography is stressed. The two latter procedures should be carried out only when and where neurosurgical facilities are available, as they may aggravate the patient's condition.

Three illustrative case reports are given in full, describing (1) mid-dorsal extradural spinal cyst, (2) giant ependymoma of the cauda equina, and (3) paravertebral and intraspinal sympathoblastoma in a newborn.

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When a patient goes to a physician for a diagnosis he literally lays his life in that physician's hands.

. . .

It is the family doctor who must help his patients to meet the threat of cancer, when it comes, with open-eyed courage, with determination and equanimity and with some confidence in the weapons already at hand.

. . .

Many physicians do not think of cancer first in the presence of certain significant symptoms.

. . .

Biopsy of a skin cancer does not increase the danger of metastasis and one should not hesitate to remove a bit of tissue for microscopic examination.

## Solid Myoma of Uterus

### Tumor Comprising over One-third of Body Weight

By R. A. Stiefel, M.D., F.A.C.S., and  
F. C. Cretsinger, M.D.

Battle Creek, Michigan

THE MOST commonly encountered tumor is the leiomyoma or fibromyoma of the uterus. However, in recent years little has been published in the literature of extremely large uterine myomas. This, no doubt, is due to the early removal of these tumors before they reach huge proportions. Neglect on the part of the patient, either because of extreme modesty or ignorance of her condition, accounts chiefly for the few large uterine myomas that are removed ante-mortem today.

Review of the older literature reveals that attempts to remove large uterine tumors usually were followed by death of the patient.

Cullen, in personal communication, reports that in his experience the largest uterine myoma removed, in which the patient survived, weighed 89 pounds. This tumor was removed by Cullen in 1906. In 1924 Marshall removed a 47-pound myoma with survival of the patient. Webster in 1902 successfully removed an 87-pound cystic myoma. Recently Beacham has reported the surgical removal of a 55-pound uterine myoma with survival of the patient.

### Case Report

A 63-year-old colored woman was admitted to Leila Y. Post Montgomery Hospital, April 11, 1946, complaining of "swelling of the abdomen," difficulty in walking and orthopnea.

In 1929 the patient first noticed her abdominal enlargement and thought then that she was pregnant. However, the abdomen gradually continued to increase in size; the patient carried on with her housework until two years before admission, when it became difficult for her to walk, and dyspnea occurred without exertion. Past history revealed no children but four miscarriages.

On admission she weighed 202 pounds and walked awkwardly. Orthopnea was present. Systolic murmurs were heard at the base and apex of the heart, with enlargement to the left. Blood pressure was 180/120. The abdomen was markedly enlarged and measured 57 inches in circumference at the umbilicus. The abdominal mass felt solid to palpation, with no evidence of fluid. It was impossible to outline the uterus in the pelvic examination, as the mass filled the entire pelvis.

Urine examination was not significant. The red blood

cell count was 4,070,000; hemoglobin 82 per cent; white cells 8,950, with a normal differential count. The Kahn test was 4 plus. An electrocardiogram showed left axis deviation. An x-ray flat plate of the abdomen was re-

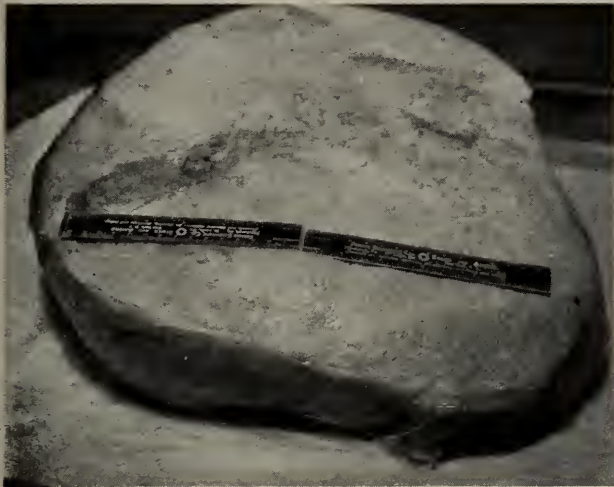


Fig. 1.

ported as showing a large soft tissue mass with calcification.

**Operation.**—On opening the abdomen the tumor was found adherent to the entire right side of the abdomen; the transverse colon and mesocolon were firmly adherent to the mass and formed a part of the efferent and afferent circulation to the tumor. The abdominal incision had to be extended upward to the xiphoid process. Following a tedious dissection of the numerous adhesions and attachments, the mass was freed and found to be attached to the uterus proper by a rather small pedicle. There also was a huge bilateral hydrosalpinx, and both ovaries appeared sclerotic. Therefore a subtotal hysterectomy, with removal of the huge main tumor and smaller fibroids, and a bilateral salpingo-oophorectomy were accomplished. Approximately 1 liter of ascitic fluid was present in the peritoneal cavity and was removed by suction. After hemostasis was effected, the wound was closed in layers and a pressure dressing applied to the abdomen. The pathological report was given as follows (Dr. G. Schelm): The tumor mass weighs 74 pounds and is solid. It measures 42 by 40 by 35 cm. A whorl-like appearance is evident except where degenerative changes have occurred. The mass is of rubbery consistency, and parts are calcified. Projecting from one end are additional masses which are encapsulated; the largest of these measures 11 by 9 by 8 cm. They too are calcified. Microscopic diagnosis: fibromyoma of the uterus, interstitial and subserous. Microscopic diagnosis of the tubes and ovaries: bilateral hydrosalpinx and atrophy of the ovaries.

The postoperative course was rather uneventful. A total of 3,000 c.c. of glucosesaline and blood was given in the first twenty-four hours. Voiding occurred voluntarily four hours after operation. Dicumarol therapy

was instituted with daily prothrombin determinations. The patient was out of bed on the fourth day but walked with difficulty because of a tendency to fall backwards. She gradually regained her equilibrium and walked without assistance on the seventh postoperative day.

The patient left the hospital on the eleventh postoperative day in apparently good condition. A follow-up after two years reported the patient in good health and working.

### Summary

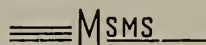
1. Uterine myomas of large size are seldom seen today.

2. The literature reveals only a small number of large uterine tumors removed successfully.

3. A report is given of the successful removal of a 74-pound uterine fibromyoma in a patient with myocardial damage and syphilis, with probably luetic aortitis.

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## RADIATION EFFECTS ON THE SKIN AND THEIR TREATMENT

(Continued from Page 466)

the surgeon and the radiologist consult on portals for the radiation with the expectation that some repair may be necessary and that the areas radiated will lend themselves best to surgical correction later.

### Summary

We have shown some of the most frequent causes of radiation damage to the skin. A review of the histopathology is included to show the deep vascular basis for the lesions we see and to emphasize the permanent loss of nutrition that occurs and makes futile many of the conservative and topical methods of treatment.

The patient in most cases can be saved months of useless local medication and extreme pain by early consultation with the operative repair of the defect in view. In most, wide excision and plastic repair is the only logical method of treatment.



# Treatment of Chronic Nonspecific Prostatitis

By Joseph A. Winter, M.D.  
St. Joseph, Michigan

**T**HIS IS A study of 100 cases of prostatitis. The cases were taken in alphabetical order from the files; no effort was made to exercise any selection.

This study was undertaken for two reasons. One was to be able to answer such questions as "How long will I have to be under treatment?" or "What are the chances of this recurring?" The second purpose was to acquire some basic data for future comparison. It is planned to make a study of various adjuncts to the treatment of chronic nonspecific prostatitis; this series of patients will be used as controls.

The data was broken down into three categories: (1) according to age group, (2) according to the number of courses of massage received, and (3) according to whether the patient discontinued treatment of his own volition or whether he remained under treatment until he had received the maximum benefit and was dismissed.

## Definitions

For the sake of accuracy it is first necessary to give some definitions. Chronic nonspecific prostatitis was suspected when the patient had the usual symptoms and when rectal examination showed that the prostate gland varied from the normal. A definite diagnosis of prostatitis was not made unless microscopic examination of the prostatic fluid showed more than 10 leukocytes per high-power field.

Not infrequently one sees patients with the symptoms of prostatitis but without pus cells in the fluid. These patients are relieved of their symptoms by a course of prostatic massages, yet never show pyospermia. Such cases are called prostatic congestion, not prostatitis, and were not considered in this series.

In transferring information from patient's charts to the data sheets, the following notation system was used: the presence of less than 10 cells per high power field of the microscope was regarded as normal and written as "O"; 10 to 20 cells were termed 1-plus pus and written as "1"; 20 to 40 cells, 2-plus pus ("2"); 40 to 100 cells, 3-plus pus

TABLE I

Courses completed: 119		
Courses incomplete: 27		
		Total No. Courses
<hr/>		
Patients receiving:		
one complete course .....	47	47
two complete courses .....	21	42
three complete courses .....	6	18
four complete courses .....	2	8
	<hr/>	<hr/>
	76	115
one incomplete course .....	19	19
two incomplete courses .....	1	2
three incomplete courses .....	1	3
	<hr/>	<hr/>
	21	24
Patients receiving two courses, completing only one .....	2	4
Patients receiving three courses, completing only two .....	1	3
	<hr/>	<hr/>
	3	7
	<hr/>	<hr/>
	100 patients	146 courses

("3"); over 100 cells, 4-plus pus ("4"). At no time was an actual count of pus cells per high-power field made; an estimate was deemed sufficiently accurate.

On occasions it was impossible to express prostatic fluid with massage. In such cases the smear was reported as "x" and, in figuring total pus-count curves, was given the numerical value of zero.

A course of massage was defined as continuous treatment with less than one month interval between any two successive massages. If the interval was longer than a month, it was considered that there were two courses.

The only treatment used in this series of cases was prostatic massage, usually given once or twice a week. Hot sitz baths were usually recommended, but no effort was made to determine how faithfully the patient followed that recommendation.

A typical line from the data sheets, then, would look like this:

8 - 65 - 2 - 1 - 7 - 0 2 X 2 2 1 1 - 5 - dism.

This means that Patient No. 8 was sixty-five years old; he needed two massages before diagnosis could be definitely made; he had one course of treatment, during which seven massages were given. The pus count for each massage was as follows: first massage, normal smear; second, 2-plus pus; third, no fluid expressed; fourth and fifth, 2-plus pus; sixth and seventh massages, 1-plus pus. He was under treatment for five weeks and was dismissed as having received maximum benefit.

Incidentally, criteria for dismissal were rather elastic and included such considerations as patient's age, probable chronicity of the infection and that indefinable attitude on the physician's part known as clinical judgment.

TABLE II

Age	All Patients	Patients Dismissed	Patients Discontinued	Percentage of Patients Disc.
Under 20	1	0	1	100 %
20-29	9	7	2	22.2%
30-39	27	21	6	22.2%
40-49	29	24	5	17.2%
50-59	18	14	4	22.2%
60-69	15	12	3	20.0%
70 and over	1	1	0	0
Total	100	79	21	

TABLE III

Diagnosis of prostatitis made with:	first smear	64% of cases
	second smear	27% of cases
	third smear	8% of cases
	ninth smear	1% of cases

### All Patients

To these 100 patients there were given 146 courses of massage; 119 courses were completed and the patients dismissed. In twenty-seven courses the patients discontinued treatment against advice. These figures are broken down in Table I.

Table II shows the dismissals versus discontinuances in the various age groups. There is apparently no significant difference here.

In this series the total number of massages given was 1,375; 1,193 of these were given in complete courses, while the other 182 were given to those twenty-one patients who discontinued.

The average number of massages in completed courses was 10.0. The average number of massages in incomplete courses was 6.7.

It was attempted to ascertain and classify the reasons for patients discontinuing treatment contrary to advice, but this was found to be impossible. Such reasons as could be determined, however, included finances, moving out of town, other illnesses which precluded continuing with massage and, most frequently, antipathy toward the undeniably unpleasant treatment.

It was felt that this tendency of patients to drift away from medical supervision should be curbed. In order to do so, the problem of prostatitis was discussed with each patient, and it was attempted to show that, while the treatment was not enjoyable, the results of not taking treatment were potentially far more serious than any temporary discomfort. It was pointed out that prostatitis of long standing sometimes tended to give rise to impotency. The possibility of such chronic irritation being a factor in carcinoma was mentioned. And as a further step, in 1946 a booklet was written in lay terminology, touching lightly on the anatomy and physiology of the prostate gland, mentioning

possible etiologic factors in prostatitis and giving a thorough discussion of the symptomatology. Each patient with prostatitis was given a copy of this booklet. It is believed that there were fewer cases of discontinuation of treatment among the patients who received the booklet, although no accurate records were kept of this.\*

There is a reason for placing such emphasis on this point. This author believes that prostatitis can cause ulcer-like symptoms or might be a factor in the etiology of peptic ulcers; can cause pseudo-coronary pain or might be a factor in the etiology of coronary occlusion. We all know that any sort of chronic irritation is a factor in carcinogenesis. We therefore believe that, as part of our mission to prevent disease as well as to cure, we should educate our patients thoroughly in the advantages of treatment of prostatitis; it is even justifiable to threaten them, in a mild sort of way, with the disadvantages of discontinuing treatment before receiving maximum benefit.

### Diagnosis

It is apparent from talking to patients who have been examined elsewhere that too many physicians rely solely on rectal examination to diagnose prostatitis. While the size, shape, consistency and mobility of the prostate are important diagnostic points, it is impossible to rule out prostatitis unless microscopic examination of the expressed secretion is made.

According to Lowsley,<sup>1</sup> "negative findings on one examination of prostatic secretion are insufficient proof of the absence of prostatitis." The findings in this group of patients bears out his statement. Table III shows the number of smears necessary before diagnosis of prostatitis.

It should be noted that in one case there were eight massages given before diagnosis; this was due to failure to obtain drainage of the prostate, that is, the massages were given but no fluid was expressed. After establishment of drainage, this patient's prostatitis ran a typical course.

### Number of Massages Per Course

Determination of the number of massages per course was made on "dismissed" patients only. The variation is shown graphically in Figure 1. Inspection of the graph will show that the average number of massages is approximately ten.

\*The author will be glad to send a copy of this booklet on request.



### Length of Courses

Figure 2 is a distribution graph showing the variation in length of courses. The average course was 8.9 weeks long.

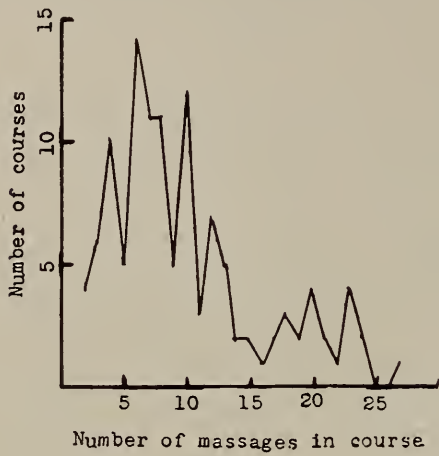


Fig. 1.

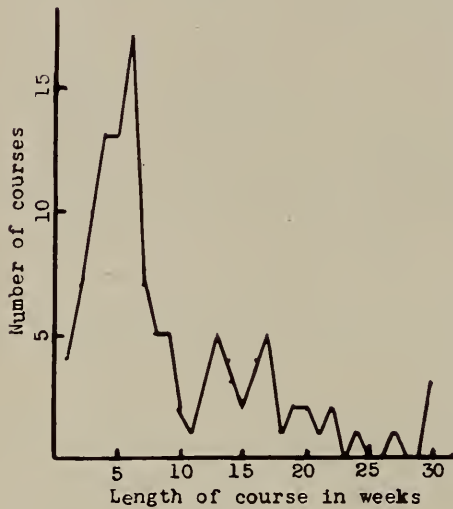


Fig. 2.

TABLE IV

In All Patients:				
Average interval between courses:				
			1 & 2.....	26.0 weeks
			2 & 3.....	28.3 weeks
			3 & 4.....	15.0 weeks
In Patients Dismissed:				
Age Group	No. in Group	No. of Courses	Average No. Courses per Patient	Average Interval Between Courses
20-29	7	10	1.4	9.6 weeks
30-39	21	30	1.4	41.0 weeks
40-49	24	40	1.6	19.5 weeks
50-59	14	22	1.6	16.7 weeks
60-69	12	16	1.3	28.0 weeks

### Intervals

In this group of patients, there were eighty-one completed first courses, thirty-one completed second courses, eight completed third courses, and two patients had four courses of massage. The interval between courses is shown in the first part

of Table IV. There is probably no significance to the lesser interval between courses three and four; the small number of patients (two) in this category makes this figure meaningless.

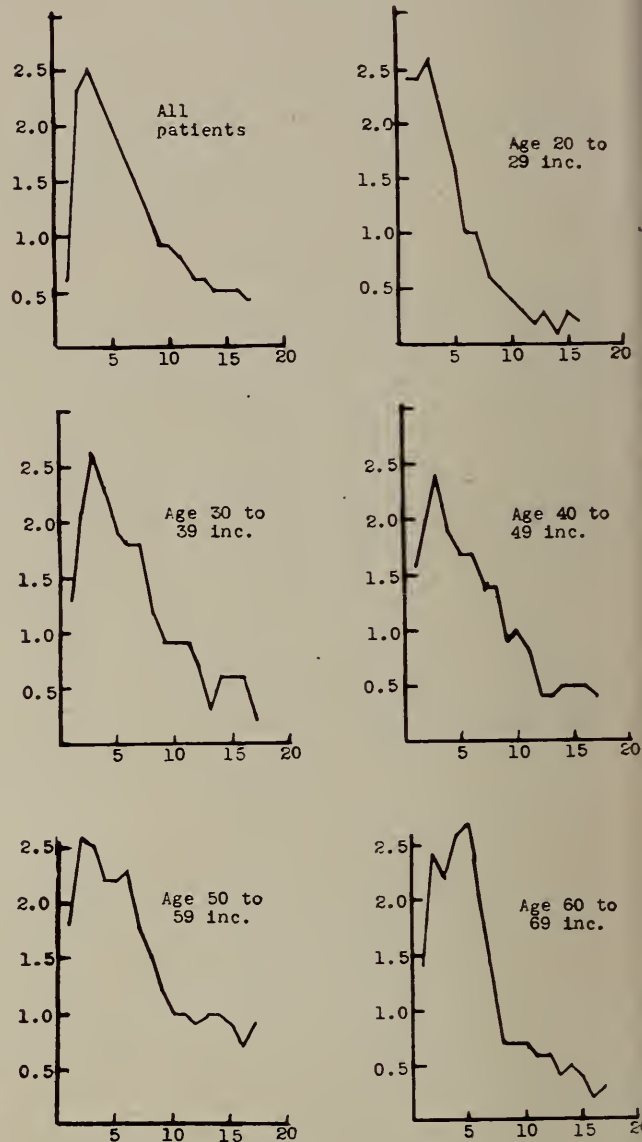


Fig. 3.

In the second part of Table IV the average intervals between courses are broken down into age groups. The interval between courses is longest in the 30-39 group, that is, the younger patients have less chance of the prostatitis recurring than do the older.

The average number of courses per patient is quite constant for all age groups. It shows that out of every three patients with prostatitis, one will need more than one course of treatment.

### Pus Count Curves

These curves, shown in Figure 3, were derived as follows: The pus cell counts for all first massages were added. (Normal cell counts and no

tate has eroded through the walls of a small blood vessel and that bleeding is a sign of drainage of the prostate, just as bleeding from a furuncle indicates that it is draining.



Fig. 4.

secretion expressed (x) were given the value of zero, 1-plus pus the value of one, et cetera) This sum was then divided by the total number of courses given in that particular group, giving the average pus cell count for the first massages. The same procedure was used for all second massages, and so on. The same denominator was used, no matter what the actual number of massages was.

The curves obtained were noticeably uniform. The pus counts in the first two massages tend to be low, reaching a maximum with the third massage, then gradually falling off toward the right.

As would be expected, the pus count decreased most rapidly in the 20-29 group; younger individuals heal more rapidly and the more chronic cases heal slower.

Figure 4 shows the pus count curves for each succeeding course of massage. Again, as would be expected, the rate of recovery is more rapid with each course of massage.

### Bloody Smears

Of all patients, sixteen at some time had blood in the expressed prostatic fluid. Twenty bloody smears in all were seen. The shortest time of appearance was at the second massage, the longest at the eleventh massage. It was impossible to determine any correlation between the appearance of blood in the prostatic fluid and the duration of treatment. It is probable that this sign is of relative unimportance. It is, however, rather disturbing to the patient, who must be reassured. The usual explanation given is that the pus in the pros-

It is realized that this is not the entire truth. The blood may also come from the veru montanum, and result from traumatism to a congested posterior urethra. Nevertheless the explanation usually given is one easier grasped by the patient and productive of less apprehension.

### Significance of Clumps

In transcribing the original data from the patients' cards, the occurrence of pus in clumps in various smears was also noted. According to some authors these clumps are actually leukocyte casts of the prostatic tubules and indicate that the prostate is not draining freely. In spite of this explanation, which seems plausible, it was impossible to show any correlation between number of smears containing clumps and duration of treatment or tendency toward recurrence. The presence of clumps is quite common; in 146 courses of treatment, smears with clumps were seen in 106.

### Discussion

It is freely conceded that there is nothing new about this study; neither the purpose nor the findings are novel. Yet there are two reasons which justify it. First, a search of the literature for the last ten years shows that no such study has been done recently. Second, patients are more willing to submit to treatment if they can be given some comforting prognostic statistics. To a patient, the answer to the question, "How long will I be under treatment?" is an important one. A definite answer, even though it is given with reservations,



is indubitably helpful in keeping the patient's confidence.

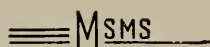
It would be out of place to discuss further the importance of treating prostatitis; that fact has been stressed and restressed by all those who have had any experience with the disease. But it should be noted that an unfortunately high percentage of patients (21 per cent in this series) are not convinced of the advantages of having a focus of infection eliminated. This percentage warns us, therefore, that we should be careful to convince the patient of the necessity for treatment—to make certain that he is thoroughly "sold" on the idea.

### Conclusions

A group of patients with chronic nonspecific prostatitis, treated by prostatic massage only, required an average of ten massages given over an average period of 8.9 weeks, before maximum benefit was obtained. One patient out of three will show the need for more than one course of treatment. The younger the patient, the more rapid his recovery will be, and if he needs a further course of treatment, the necessity will take longer to develop.

### Reference

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## ATTEMPTS AT THE CHEMOTHERAPY OF CANCER

(Continued from Page 457)

been synthesized and tested. In addition, other compounds have been substituted; for example, ethionine has been made to replace methionine. Details of the chemistry and of the results in normal growth and development in animals have been published or are in the process of publication.

In this brief summary we have tried to indicate that at least a start has been made on systematic studies of chemotherapeutic agents in cancer, and that there are data in the literature of value, at least, as logical starting points.

We close by asking the encouragement and support of clinicians. The above is part of what those of us in research are working and thinking.† We welcome any unusual observations, for thought

†For an excellent review, see Karnofsky, David A.: *Medical progress: chemotherapy of neoplastic disease*. I. Methods of approach. II. Trends in experimental cancer therapy. III. Agents of clinical value. *New England J. Med.*, 239:226-231, 260-270, 299-305, 1948.

and possible experimental attack. We add a plea that when any of these substances is tried, every possible observation be made and recorded as guides for further work. Meager though the results are to date, everyone must agree that unless we make a start we cannot proceed—and unless we try we can never find out.

## SPLENIC NEUTROPENIA ASSOCIATED WITH HODGKIN'S DISEASE

(Continued from Page 470)

Since the patient was eager to chance the surgical procedure, and since there was no specific contraindication to splenectomy, the operation was performed. Since splenectomy the count has risen—certainly not as high as one would like—but evidently high enough to resist infection. The patient has been working every day in his automobile agency and has been free of infection from the time of surgery to the time last seen (March 3, 1948). It is, therefore, felt that the splenectomy was of benefit to the patient by helping to relieve the leukopenia and neutropenia.

### Summary

1. A case of Hodgkin's disease with splenic neutropenia as a complication is reported.
2. Splenectomy was of definite beneficial value for the leukopenia, the neutropenia and tendency toward infection.

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Leukemic infiltration of the skin is more common in lymphatic leukemia.

A history of repeated crusting, slight bleeding and reformation of the crust is very significant of basal cell carcinoma of the skin.

Probably the cancer patients who do the best are those who know what is wrong with them, who understand what is being done for them, and who are willing to endure without too much complaint whatever discomfort is unavoidable.

## Cancer—A Challenge to the Doctor

The problem of cancer still remains a challenge and an enigma to the medical profession. We have no simple test which will tell us our patient has a cancer somewhere in his body. If we had, cancer detection would become a relatively simple matter. In our present knowledge there is only one solution and that is early diagnosis and treatment.

An aroused and determined profession can do much toward reducing our present mortality from cancer. This is not primarily a job for the specialist but depends upon the well-informed family doctor who should be thoroughly familiar with the early physical signs of cancer of various organs, and who is willing to devote the time to do a complete physical examination. This must include the rectum, the vagina, the breasts, prostate and the mouth, since three quarters of all cancer starts in those organs which are readily accessible to examination. It is here that the physician plays a most important part in the reduction of cancer mortality.

To develop an increased consciousness of the cancer problem amongst our doctors, the weekly CPC and the Tumor Clinic, with case presentation for group consultation and discussion and follow-up reports, is most effective. This type of continuation study must be encouraged and increased. Our intra and extra-mural postgraduate programs should constantly include subjects emphasizing early signs of cancer. Our public education program should be directed toward the elimination of the element of fear of cancer, and more stress placed upon the good clinical results from early detection and treatment. Our present Cancer Detection Clinics do not reach enough people. It is possible that an expansion of the Hillsdale Plan—with every doctor's office a cancer detection center—is a solution but this depends upon the determination of our doctors to do the job.

Much commendation should be directed toward the Cancer Control Committee of the Michigan State Medical Society, the Field Army of the American Cancer Society, and the many County Medical Societies with their Cancer Day Programs, which have and are doing yeomen service in arousing both public and professional interest in fighting this disease.

To reduce cancer mortality, let us attend the watchwords, "Complete and repeated physical examinations."

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



*Page*



# Editorial

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## TOOLS FOR CANCER DETECTION

WITH THE greatly increased public interest in the problem of cancer control, the medical profession is faced with an increasing demand for examinations to detect cancer in early stages. Various plans have been offered for this purpose, some of which embrace the participation of lay individuals and groups in the examination and recording of findings. No matter what plan is followed, the physician remains the key man in all these examination programs. It is his ability to evaluate properly the patient's physical symptoms that determines success or failure of the undertaking.

In some larger population centers special organizations—cancer detection centers—have been developed to render this service. For many reasons, chief of which are costs and limited capacity precluding service to the great majority of people, the cancer detection center as at present organized, cannot solve the early diagnosis problem of the community.

The alternative to the detection center is to make every physician's office a cancer detection unit. By this means it is possible to make many more examinations more easily, effectively, and at less cost than by any other plan yet devised.

Every physician has at his command the tools for cancer detection, either in himself, his office, or readily available nearby. Three important tools are the eyes, ears, and hands of the physician. Surface and near surface suspicious lesions, which comprise a fair percentage of all malignancies, can be seen or felt. The microscopic examination of biopsy material in competent hands often will clinch the diagnosis of suspected lesions. The x-ray holds the answer to the character of many suspicious growths in bones, lungs, and hollow viscera such as the gastrointestinal tract.

The judicious use of these tools for cancer detection will generally make possible the identification of malignant lesion. The full range of usefulness of each tool should always be employed before seeking other and often more complicated means for diagnosis, or reaching a decision as to the character of the lesion in question.

The diagnosis of a cancer in its very early

stage may be difficult. For the types less difficult to recognize, the first physician consulted carries the responsibility for diagnosis. For the lesion identified only after numerous and complicated examinations, several physicians may be jointly responsible. However, the tools for detection remain largely the same for all types of malignancy, especially in the beginning of the study.

Some published reports show little, if any, improvement in the physician's diagnostic ability during the past decade. Other reports indicate that for detection of cancer in certain anatomical locations, his diagnostic ability has improved almost 100 per cent. The overall increase in diagnostic ability probably lies some place between these two extremes. It is hardly possible, with the development of new and better diagnostic aids and with all the emphasis given to professional cancer education during recent years, that no improvement in diagnostic skill has been made.

As many more cancer patients are consulting physicians in earlier stages of their disease, there is evidence that the public is responding to the cancer educational program. There is also need for the physician to exercise increasingly greater care since the earlier the lesion, usually the more difficult the diagnosis. When all physicians use the tools available for cancer detection, it is probable that the delays in diagnosis now charged to the physician will decrease. Physicians should always "look and see," never "wait and see," and should look for cancer in every diagnosis made.

CANCER COMMITTEE

## DOCTORS MUST VOLUNTEER OR BE DRAFTED

ON FEBRUARY 25 the United States Secretary of Defense laid it on the line—voluntary commissionings in Army and Navy Medical and Dental Corps must rise sharply, and quickly, or it will become necessary to ask Congress for a doctor draft. The most equitable solution, according to the Secretary of Defense, rests with the 15,000 young doctors who were draft-deferred to complete their education and, subsequently, saw no military duty. The Secretary of Defense is request-

ing medical organizations, especially county medical societies, to appeal to former ASTP's and V-12's who are non-veterans.

AMA President Sensenich addressed a letter to these young doctors on December 20, 1948, urging them to volunteer their services to the Armed Forces. Of these physicians under the age of 26, only 500 requested applications for commissions. This does not even take care of the 2,100 doctors now on active duty whose release during the next few months from service is contemplated. A serious medical shortage is threatened.

The time has come for direct conversation with the 15,000 young physicians eligible for military service, to insure a larger proportion of volunteers for active duty. Personal conferences are indicated to prevent a special "doctor draft" and to insure the consummation of the commissioning process.

This is a job that cannot be done by any group except the county medical society. The medical profession must supply the doctors the Armed Forces need by voluntary methods, or it will be done by compulsory methods!

Action on this matter cannot be delayed! We don't want compulsion.

L. FERNALD FOSTER, M.D.

## BLUE SHIELD-BLUE CROSS NOW OVER TEN MILLION SUBSCRIBERS

AS OF January 31, 1949, the Michigan Blue Shield, Michigan Medical Service was protecting 1,328,988 persons, and the Michigan Hospital Service had enrolled 1,537,000. The Blue Shield of New York City has recently passed the million mark, and we understand Massachusetts is crowding that figure. California physicians' service on December 31, 1948, had 699,998 members and ranks fourth in size in the United States. Michigan's enrollment of Ford Motor Company added over 205,000 subscribers and boosted the total subscribers of the voluntary, non-profit, medical care plans over the *ten million mark* for 1948.

The Blue Shield Commission accepted membership applications from five additional prepayment plans at its meeting on January 15-16, 1949. Membership in AMCP has reached a total of sixty plans.

Admitted to full membership in January were: Arkansas Medical and Hospital Service, Little

Rock; Central New York Medical Plan, Syracuse; Klamath Medical Service Bureau, Klamath Falls, Oregon; Physicians Association of Clackamas County, Oregon City, Oregon (re-instatement); and Puerto Rico Hospital Service Association, San Juan, Puerto Rico.

There are only three medically sponsored prepayment plans in active operation, considered as eligible, which are not listed as members of AMCP. Three or four plans, in process of organization, may soon become eligible for membership.

## HOSPITAL COSTS AND SOCIAL SECURITY

ONE of the principal motivations for the pressure from labor to develop a national compulsory health insurance and to socialize the practice of medicine is undoubtedly the high and increasing costs of hospital care. All recent surveys show that the over-all costs of hospitals stated as a per diem charge have greatly increased within the past ten years, and are still increasing. These costs run, in the smaller cities of the state, from around \$16 to \$18 per day, up to \$23 to \$26 in the larger cities, and in some hospitals even higher. The situation is so serious that we are hearing whispered rumors that certain hospitals, well-known in our state, are facing such severe financial stringency that they may be forced to close.

Blue Cross is facing this problem and has recently increased rates in order to meet the new demands. This organization is representative of the financial situation of the general public because it pays the hospital bill as presented rather than meeting the situation as indemnity insurance companies do, which have limited their payments to a fixed amount and are independent of fluctuating rates.

A large item in hospital expense is that due to the training and teaching of doctors, nurses and technicians. The nurses' training costs alone have expanded to such an extent that in some of our larger hospitals it approaches a six figure item per annum. This is an expense which should be charged against the whole community instead of the unfortunate individual who has to occupy a hospital bed; further, it is economically unsound to make these charges for educational facilities against those who have to pay for hospital services, be it the individual who pays from his own pocket or the Blue Cross subscriber. Some method



should be devised whereby this educational cost could be assessed against the whole state, or at least the tax-paying public, and it would be as justifiable as the charge for our other educational expenses, including the operation of normal training schools, medical, dental, law, or engineering schools. This would remove from the present costs of hospital care an amount estimated at possibly \$5 or more per day. If the Federal Government wishes to contribute in the field of health services, here is an item they might well consider. It would be very much less costly, it would help to meet a glaring need, and it would extend aid in education, while relieving the infirm public from an unjust burden; moreover, it would retain for the American public its self-respect as self-reliant, competent individuals who need only the opportunity to care for their own without paternalistic over-solicitude.

### DOCTOR'S INCOME

MUCH criticism and much comment has appeared in labor's press about the recent series of articles in *Medical Economics*, concerning doctors' incomes. We mentioned this subject in our JOURNAL\* and invited attention to the false impression given by mention of gross incomes. Gross incomes mean nothing. They are red herrings to invite criticism. Many people think doctors' incomes are too high and the figures they see, before the making of deductions, are the gross incomes. If *Medical Economics* had stressed the net incomes instead of the gross incomes, the impression given the public would have been different. Their book is, to be sure, a publication supposedly distributed to the profession only, and for medico-economic use; but many times these little magazines are placed on reading room tables and they get distributed so that waiting patients see them and read the items, not knowing that an item of \$20,000 as a gross income means approximately \$8,000 as a net income, when the costs of practice, interest and investment, donations for necessary charities and claims which are made upon the doctor because of his professional standing, and taxes are deducted. If the \$20,000 income had been reported as an \$8,000 income, no one would even raise an eyebrow, but \$20,000 sounds like a lot of money. We still believe, as we have said before, that the doctors should get into the habit of considering their

income as the laboring man does, leaving out of consideration all the extra amount he must earn in order to have his "take home pay." Labor never considers those figures and we must take a hint from them.

### OFFICE GIRL PRACTICE

IN THE last few years, the practice has grown up (and it probably reaches back many years) of office girls practicing medicine. We have had some complaints consequently. While the doctor is on vacation, his patients frequently call the office girl or office nurse and ask questions, and the answers involve the practice of medicine. Technically, these questions should not be answered but should be referred to some responsible person selected or designated by the doctor. We know that the office staff is pretty well acquainted with what the doctor is doing for that particular patient and can, undoubtedly, carry out his ideas during his temporary absence. In cases of emergency, that is the best that can be done, unless another doctor is available to supply the answers. When this type of office prescribing is done, records should be kept and referred to the doctor immediately upon his return. Wherever possible and wherever the question is of any real medical significance, great care should be taken to secure the really proper reply, and from authoritative sources. This may well and properly mean calling another doctor and asking him the question.

Don't chance a malpractice suit. You're responsible for your agent's action!

### On the Run . . .

Sternal marrow biopsy for myelomatosis should be performed when a patient between forty and sixty years of age has unexplained fever, wasting, backache and possibly anemia and expistaxis.

In soldiers between eighteen and forty years of age dying suddenly, 30 per cent were found to have sclerosis of a coronary artery while 35 per cent had previously unrecognized heart disease.

Unilateral left pleural effusion from cardiac failure is rare unless the right pleural cavity is obliterated by adhesions.

Cobalt has assumed added nutritional significance because of its presence in the potent anti-anemic vitamin B-12.

\*August 1948, page 888.

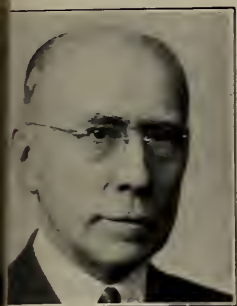
# Know Your MSMS Councilors

*They are Leaders in Professional and Civic Activities on the Local, State, and National Levels*

## TWELFTH DISTRICT

Albert Harvey Miller, M.D.

*Gladstone*



Dr. Miller was born in Canada and received his pre-medical training in Forms I and II in Ontario, and his State License of Pharmacy following this work. He earned his M.D. degree at the University of Michigan in 1904, and continued his postgraduate work with attendance at many of the

teaching Centers in Europe and America.

A past-president of the Upper Peninsula Medical Society, Dr. Miller is also a past-vice president of the Michigan State Medical Society, and past-president and secretary of the Delta-Schoolcraft County Medical Society.

The Councilor of the Twelfth District is now serving on the staff of St. Francis Hospital in Escanaba, Michigan.

## FOURTEENTH DISTRICT

Dean Wentworth Myers, M.D.

*Ann Arbor*



Dr. Myers took pre-medical work at Ann Arbor High School and received his M.D. degree from the University of Michigan in 1899. He interned as an Assistant in Ophthalmology, Otology, and Laryngology at the University of Michigan. His postgraduate work includes attendance at clinics in Bos-

ton, New York, and Chicago.

A First Lieutenant in the Medical Reserve Corps in World War I, Dr. Myers has been active in civic affairs for many years. He has served as a member of the Board of Education of the Ann Arbor Public Schools, president of the Ann Arbor City Council, president of the University of Michigan Alumni Club of Ann Arbor, president of the Ann Arbor Rotary Club, president of the Ann Arbor Chamber of Commerce, and chairman of the Washtenaw County Democratic Committee.

Dr. Myers is a Knight Templar and a member of Alpha Sigma and Theta Kappa Psi Fraternities.

The Councilor of the Fourteenth District, who has been on the staff of St. Joseph Mercy Hospital since 1913, has several "firsts" to his credit. He was one of the first two surgeons to perform a closed capsule extraction of cataractous crystalline lens, and for the first and only time in medical history proved the exact conduct for the eyeball in the orbit and its exact center of rotation by a series of x-ray photographs of a needle passed directly through the eyeball.

## SIXTEENTH DISTRICT

Eugene Adolph Osius, M.D.

*Detroit*



The Councilor of the Sixteenth District completed his pre-medical work and was graduated from the University of Michigan in 1921. He served his internship at Massachusetts General Hospital, Boston, with residency at Harper Hospital, Detroit, where he was also Assistant Superintendent. Fol-

lowing his work at Harper, Dr. Osius studied in Berlin, Budapest, and Vienna for a year.

In World War I, Dr. Osius was an apprentice seaman. In the Second World War he served as a Commander, M.C., USNR, for four years, two of which were spent in the South Pacific.

Among his many professional affiliations, are memberships as a Fellow in the American College of Surgeons, a Diplomate of the American Board of Surgery, president of the Detroit Medical Club, secretary of the Detroit Medical History Club, member of the Central Surgical Association, Detroit Academy of Surgery, the Detroit Academy of Medicine, and the Detroit Surgical Association. In addition to these activities Dr. Osius is also a member of the Harmonie Society.

He is now active as surgeon at Harper Hospital and at Children's Hospital of Michigan, associate surgeon at Receiving Hospital, consulting surgeon Herman Kiefer and Veterans' Hospitals, and is on the Courtesy Staff of Cottage Hospital.



## IMMEDIATE PAST PRESIDENT

**Patrick Liam Ledwidge, M.D.**

*Detroit*



Dr. Ledwidge obtained his premedical degree at Michigan State Normal College, Ypsilanti, and his M.D. at Wayne University in 1920. He served his internship at Harper Hospital with residency at Harper and Children's Hospitals of Michigan.

Dr. Ledwidge is affiliated with many phases of organized medicine: he is a Fellow of the American College of Physicians, a Diplomate in American Board of Internal Medicine, member, past president, and secretary of the Detroit Medical Club. He also served as speaker of the House of Delegates of the Michigan State Medical Society from 1941-1946 and as president from 1947-1948.

In addition to his duties as Assistant Professor in Clinical Medicine at Wayne University College of Medicine, he is physician to the inside staff of Harper Hospital, consulting physician to Mt. Carmel Hospital, and has been elected Chief of Medicine for the proposed Woodward General Hospital.

## SEVENTEENTH DISTRICT

**Winfred Bronsart Harm, M.D.**

*Detroit*



Dr. Harm received his elementary and high school education in Nebraska with his pre-medical training being completed at the University of Nebraska. He was graduated from the Detroit College of Medicine and Surgery in 1916. After one year's internship at St. Mary's Hospital, Detroit he entered general practice in the Motor City.

Dr. Harm served as a Captain in the Medical Corps during World War I and was decorated with the Order of University Palms by the French Government.

Civic activity has occupied much of Dr. Harm's life. He is a Fourth Degree member of the Knights of Columbus, a longtime member of the Catholic Order of Foresters, Detroit Yacht Club, Dearborn Country Club, American Philatelic Society, Asso-

ciation of Military Surgeons, Detroit Museum of Art Founders Society, Director of Michigan Medical Service.

The Councilor of the Seventeenth District is a past president of the Wayne County Medical Society and has served on many of its committees. He was editor of the *Detroit Medical News* in 1944-45. He has also served as secretary of the General Practice Section of the American Medical Association.

## THIRTEENTH DISTRICT

**William Solomon Jones, M.D.**

*Menominee*



The present Councilor of the Thirteenth District received his pre-medical training at the University of Georgia and his M.D. at the University of Chicago in 1915. He served his internship at the Presbyterian and Children's Memorial Hospitals in Chicago. His post-graduate study includes work

at the University of Pennsylvania, Knapp Memorial Hospital, New York, and at the University of Vienna.

Dr. Jones is a past president and secretary of the Menominee County Medical Society, and a past president of the Central Wisconsin Eye, Ear, Nose and Throat Society.

## EIGHTEENTH DISTRICT

**William Bromme, M.D.**

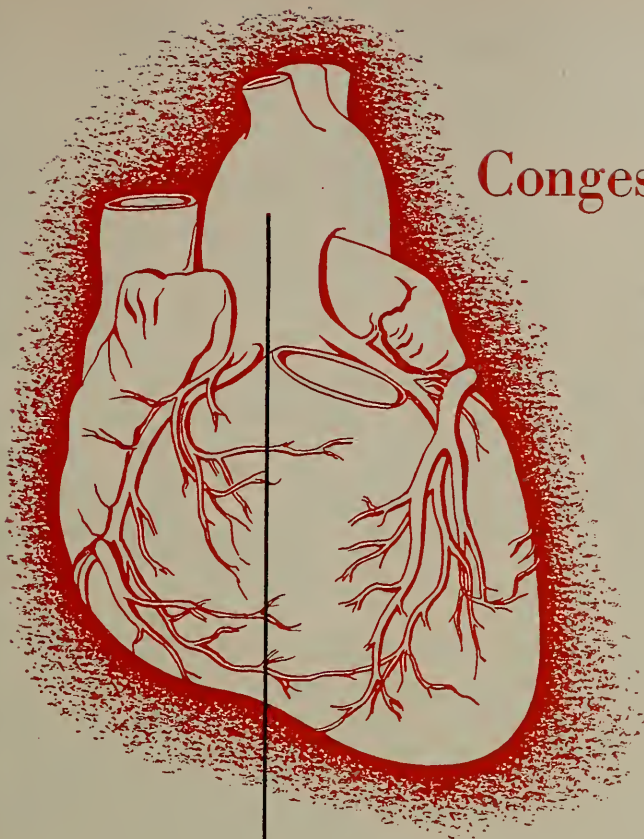
*Detroit*



Dr. Bromme received his pre-medical and medical degrees from the University of Michigan. After he was graduated in 1931, he interned at the University Hospital, Ann Arbor. He studied at the University of Michigan graduate school until 1935 and obtained his M.S. in Surgery.

A Lieutenant Colonel in the Medical Corps during World War II, Dr. Bromme is affiliated with numerous professional organizations. Among these are memberships in the Detroit Medical Club, the Detroit Surgical Association of which he is a founder member, American College of Surgeons, American Board of Urology Association, Detroit

*(Continued on Page 494)*



## Congestive Heart Failure...

"The most striking effects were seen in cases of hypertensive heart failure. . . . There is a rapid fall in the raised right auricular pressure with a conspicuous increase in the output of the heart."<sup>1</sup>

SEARLE

# AMINOPHYLLIN\*

—improves cardiac failure by effecting an improved heart action with increased blood flow, and eliminating edema fluids by the renal route.

Searle Aminophyllin is indicated in paroxysmal dyspnea, bronchial asthma, Cheyne-Stokes respiration and selected cardiac cases.

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*\*Searle Aminophyllin contains at least 80% of anhydrous theophylline. G. D. Searle & Co., Chicago 80, Illinois.*

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

1. Howarth, S.; McMichael, J., and Sharpey-Schafer, E. P.: The Circulatory Action of Theophylline Ethylene Diamine, Clin. Sc. 6:125 (July 17) 1947.



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## STREAMLINING THE MICHIGAN DEPARTMENT OF HEALTH

Streamlining the Michigan Department of Health from thirteen bureaus and three groups into a cabinet type of organization with six divisions and one administrative group was undertaken in March.

A Division of Local Health Services was formed by combining the former Bureaus of Local Health Services, Public Health Dentistry, Maternal and Child Health and Public Health Nursing. This combination was expected to make more efficient use of state health services through the correlation of those bureaus which primarily work with local people, and it was expected to draw the local health departments even more into a closely knit overall plan of health protection.

The former Bureaus of Finance and Education, along with Personnel, Law Enforcement and Communications groups were combined into an administrative group responsible directly to the Commissioner through an administrative assistant.

The Bureaus of Venereal Disease Control and Tuberculosis Control had been combined into one Division, and the Bureaus of Disease Control and Records and Statistics into another. The Bureaus of Laboratories, Industrial Health and Engineering all became separate divisions. The six division directors report directly to the Commissioner.

The new organization is expected to co-ordinate the work of the department better and make it possible to provide more and faster service to the people of the state. Provision for an administrative assistant, rather than a deputy, makes it possible to substitute a non-medically trained person to relieve the Commissioner of routine administrative affairs. It also makes possible direct contact of the Commissioner and Division Directors without any buffer. Regular staff conferences will include not only the Division Directors but also the program chiefs.

## THREE IN ONE HUNDRED

Three out of every hundred children in the state of Michigan have hearing loss which needs attention, it is indicated by reports of the first six years of the Hearing Conservation Program of the Department.

Of the quarter of a million children whose hearing has been tested, 7,500 have hearing losses which require attention. One per cent or 2,500 are so handicapped by hearing loss that they require either special education in lip-reading, assignment to a room for the hard-of-hearing, or assignment to a special school for the hard-of-hearing. Two per cent need classroom adjustment to make up for hearing deficiency.

Half of the children with hearing loss who received medical attention regained their normal hearing. More than 70 per cent had their hearing improved.

All school children should have their hearing tested once every three years. The Department has been able to test only one tenth of the school children in the state in six years.

## STUDIES IN THE DEPARTMENT

A visitor in the Department during March was Manlio Giracca, chief of construction section, Government of Guatemala, Guatemala City.

In the United States on a six months' fellowship to study water purification and sewage disposal plants, he spent much of his time with department engineers and sanitarians in this section of the state.

## MATERNITY INSTITUTES FOR NURSES

A brief spring camping respite as well as the latest information on maternity care is in prospect for Michigan's busy hospital maternity and public health nurses.

Three-day camp institutes are to be held in May and June at St. Mary's Lake, Battle Creek; Birch Lodge, Roscommon; and Bay Cliff Camp, Marquette. Each camp will accommodate fifty nurses. Experts on maternal care will speak.

Programs are being arranged by the Bureau of Public Health Nursing and the Maternal and Child Health Bureau of the State Health Department.

## EAR PAMPHLET PREPARED

As a part of its hearing conservation program, the Department has prepared a poster type of leaflet, "Guard Your Child's Ears," which is available for general distribution. It should be of special advantage to mothers of small children.

## NEW STATISTICIAN EMPLOYED

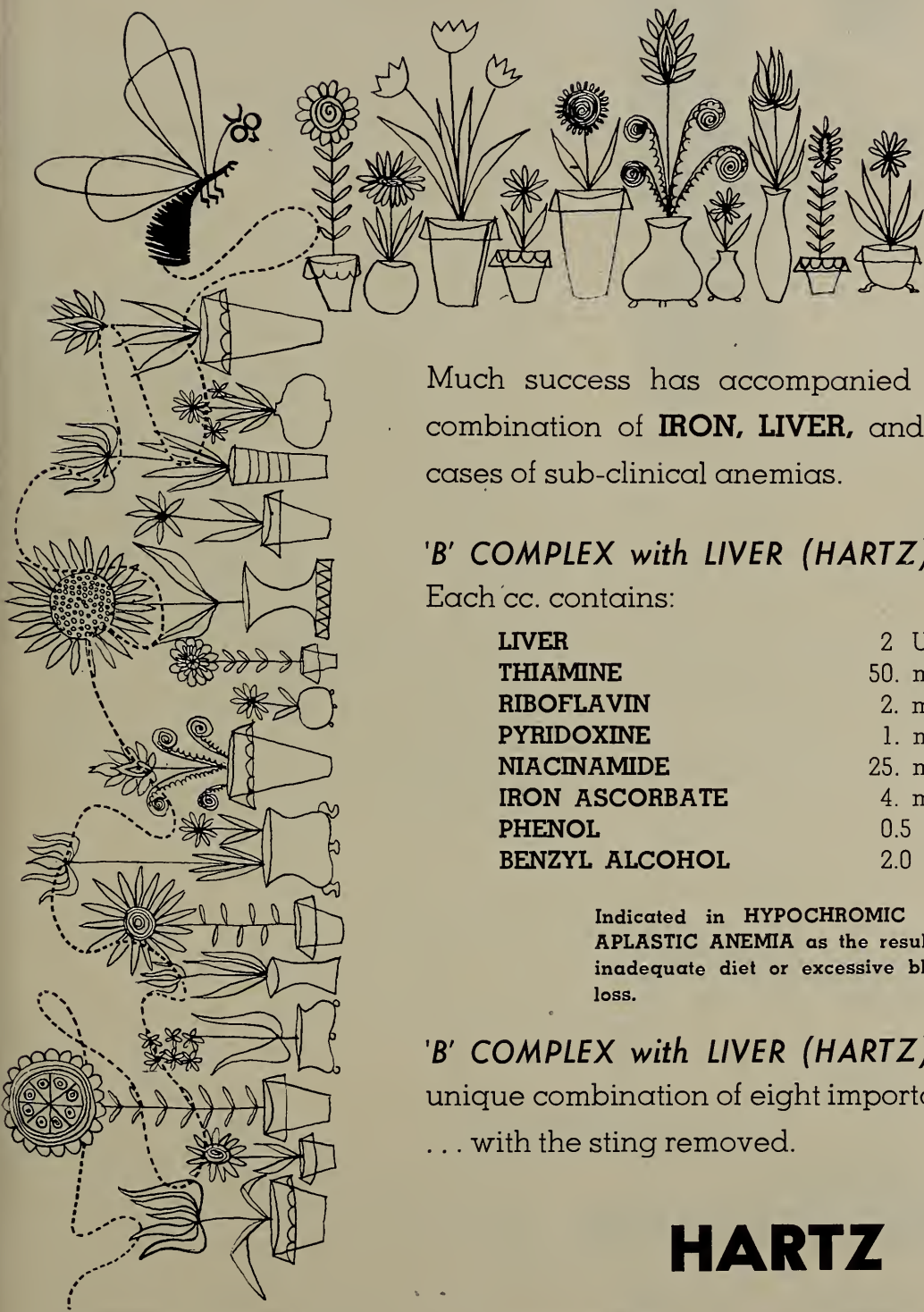
Doris L. Duxbury has joined the staff of the Division of Disease Control, Records and Statistics, as Chief, Statistical Methods Section. Miss Duxbury recently completed a three-year tour of duty as chief medical statistician with the Public Health Branch of the office of Military Government in Germany.

## PAMPHLETS ON FLUORINATING CITY WATER

To answer questions on the advisability and method of fluorination of public water supplies for the prevention of dental caries, the Department has prepared three pamphlets which are available for general distribution. They are: "Fluorination and Dental Caries"; "A Statement of Policy on Fluorination of Public Water Supplies," and "Procedure for the Fluorination of Public Water Supplies."

*(Continued on Page 494)*

# 'B' with the STING REMOVED



Much success has accompanied the injectable combination of **IRON, LIVER, and VITAMINS** in cases of sub-clinical anemias.

'B' COMPLEX with LIVER (HARTZ) 30 cc. Vial.

Each cc. contains:

LIVER	2 USP Units
THIAMINE	50. mg.
RIBOFLAVIN	2. mg.
PYRIDOXINE	1. mg.
NIACINAMIDE	25. mg.
IRON ASCORBATE	4. mg.
PHENOL	0.5 %
BENZYL ALCOHOL	2.0 %

Indicated in **HYPOCHROMIC** and **APLASTIC ANEMIA** as the result of inadequate diet or excessive blood loss.

'B' COMPLEX with LIVER (HARTZ) offers a unique combination of eight important ingredients . . . with the sting removed.

## HARTZ

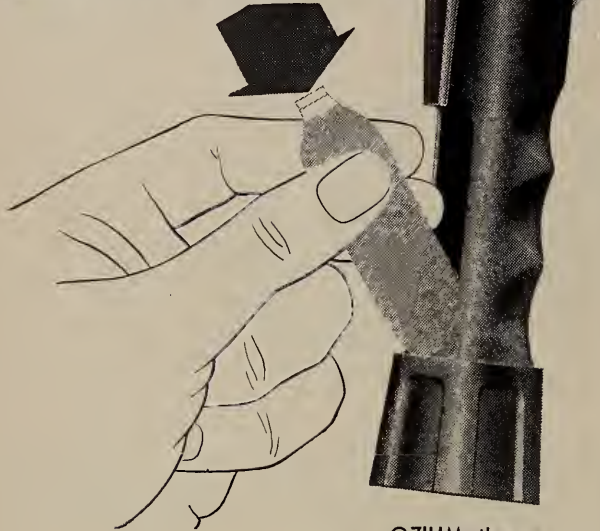
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ROOMS



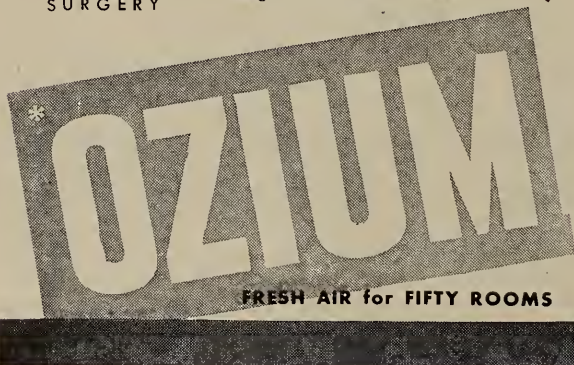
OFFICES



SURGERY

OZIUM, the new, fast-acting air freshener will eradicate objectionable odors from your reception-room, office and surgery. OZIUM—fortified with propylene and triethylene glycols—has proved effective wherever it is used. OZIUM is economical—you can freshen the air in the average room for a fraction of a cent. A touch of a lever and OZIUM is on the job.

Reg. U.S. Pat. Off Pat. Pend.



## THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit 1, Michigan

(Continued from Page 492)

### HEADS NEW COMBINED DEPARTMENT

M. R. French, M.D., who has been director of the Van Buren County Health Department for the past nine years, is the new Director of the combined Branch-Hillsdale Health Department. His appointment was effective March 1. Offices of the new Department are 39 North Street, Hillsdale, Michigan.

### TELLS OF LOCAL HEALTH DEPARTMENTS

The Department has prepared a new pamphlet, "What Your Health Department Does for You," which briefly explains the services of a local health department to a community. The pamphlet is available in quantities without charge.

### CHANGE IN SILVER NITRATE

The silver nitrate which the Laboratories of the Department is now distributing for prophylaxis of the eye is in ampules made of Zophar Mills Wax instead of the customary beeswax. These ampules are considerably smaller but each ampule contains sufficient silver nitrate for both eyes. The change became effective with lot number 230A, expiration date, January 31, 1950.

### INCIDENCE OF COMMUNICABLE DISEASE

Disease	February, 1949	February, 1948
Diphtheria .....	6	14
Gonorrhea .....	613	773
Lobar pneumonia.....	95	85
Measles .....	2113	5541
Meningococcic meningitis.....	16	9
Pertussis .....	172	452
Poliomyelitis .....	7	3
Scarlet fever.....	1380	672
Syphilis .....	771	1162
Tuberculosis .....	336	437
Typhoid fever.....	6	2
Undulant fever.....	11	8
Smallpox .....	0	0

### KNOW YOUR MSMS COUNCILORS

(Continued from Page 490)

Urologic Society, and the American Urological Association.

The Councilor of the Eighteenth District has been active in the medical publications field serving as editor of the *Detroit Medical News* in 1940-41, associate editor during 1948-49 and is editor-in-chief at the present time. Dr. Bromme is also editor of the *Woman's Hospital Bulletin*.

His hospital work is divided between Woman's and Harper Hospitals in Detroit, and Veterans' Hospital (Dearborn) where he is a Consultant in Urology.



## *It Takes More than Hay to Raise a Family these Days!*

It takes lots of nutritious food, for instance, and "that ain't hay" when it comes to budgeting expenses! Which makes it even more important to remember that the most perfect food of all, pure fresh milk, offers the budget planner a greater value than ever before. Penny for penny, your best food buy is milk! No other food can match milk's all 'round dietary value at anywhere near milk's economical price. And it's equally true, we believe, that no other milk can offer the same unvarying high quality that you'll find under Borden's system of quality control. There's a Borden milk to meet your every dietary recommendation!

# *Borden's*

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**DETROIT 1, MICH.**

## Communications

February 1, 1949

Wilfred Haughey, M.D.  
610 Post Building,  
Battle Creek, Michigan

Dear Dr. Haughey:

Last week I received an anonymous letter, a copy of which I enclose. The spelling was exactly as in the letter and it was typewritten, showing that the writer is fairly well educated. Not being able to answer him directly, I, for my own satisfaction, dictated a reply to the letter and I enclose same.

I showed this to Bill Bromme and he thought it might be of interest to publish in *THE JOURNAL*, as it is a question that the patient often asks of the doctor. Incidentally, the thing that started this letter from our unknown friend was a general letter that we give to all babies born in our hospital, inviting them to join the Babies' Alumni Association at the cost of \$1.00 per year!

If you see fit to use this, feel free to edit it in any way that you wish.

Yours cordially,  
HARTMAN A. LICHTWARDT, M.D.  
Medical Director  
Woman's Hospital of Detroit.

January 21, 1949  
Detroit, Michigan

Dear Rackteer;

Enclosed, you will found your rackteering literature, that is supposedly to convince the average person that the money donated, will go towards building a maternity building and for the unfortunate mothers who can not pay for maternity service. *Who are you trying to fool?*

Consider the following facts;

1. Hospital are (*non-profitable*)? organizations. They pay no taxes.
2. Bed at hospital cost \$11.00 per day.  
Two to four beds to a room or  
\$22.00 or \$44.00 per day per room.  
A room at the Book Cadillac with twin beds and private bath and shower \$13.00 per day. Which would you rather have?
3. Meals, medicine, X-Ray, operating, etc., or any other service, one receives, pays for it.  
Nothing free.
4. X-Ray for T.B. Cost \$2.50  
Over the radio they urge everyone to have a test for T.B. *No charge.*  
*Hospital Charge \$2.50.*
5. Try to get into a Hospital without a deposit.  
After digesting the above facts, you might wonder why the people are asking for socialized medicine.  
Clean out your back yard before asking for charity.  
P.S. Comparing a bill of 1943 to one of 1948, for the same case. Bill of 1948 triple the one of 1943. *Why?*

January 27, 1949

Dear Anonymous Friend:

It would have been a pleasure to have written to you directly had you had the courage, the courtesy and the common sense to sign your letter of January 21.

You have the mistaken idea that hospitals are not anxious to explain to their patients the reason for the

(Continued on Page 498)



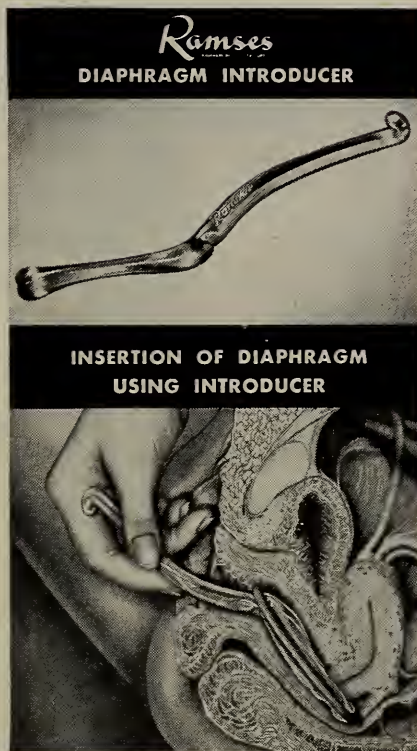
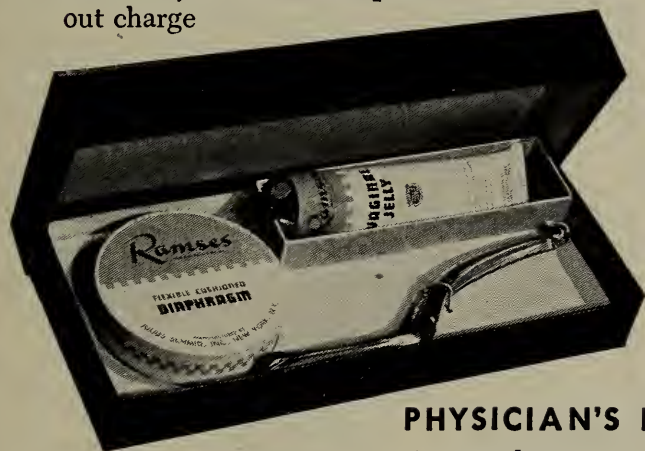
# Facts About Conception Control

## THE USE OF THE DIAPHRAGM INTRODUCER

Use of a diaphragm introducer is favored by many patients who find manual manipulation objectionable or difficult. It facilitates the insertion and correct placement of the diaphragm, as well as its removal. The "RAMSES" \* Diaphragm Introducer provides the following features:

- Simplicity and convenience in use
- Safety — design minimizes possibility of injury to the cervix or accidental insertion into the urethra
- Smooth surface lessens bacterial proliferation — makes for easy cleaning
- Ease of removal assured by bluntly hooked end

The "RAMSES" Diaphragm Introducer is supplied in the Physician's Prescription Packet No. 501, without charge



**Ramses**  
TRADEMARK REG. U.S. PAT. OFF.

### PHYSICIAN'S PRESCRIPTION PACKET NO. 501

A complete unit for conception control. Contains (1) a "RAMSES" Flexible Cushioned Diaphragm of the prescribed size, (2) a "RAMSES" Diaphragm Introducer of corresponding size, and (3) a tube of "RAMSES" Vaginal Jelly† (regular size).

\* The word "RAMSES" is a registered trademark of Julius Schmid, Inc.

† Active Ingredients: Dodecaethyleneglycol Monolaurate 5%; Boric Acid 1%; Alcohol 5%.



**gynecological division**

*Julius Schmid, Inc.*

**423 West 55th Street, New York 19, N. Y.**

**quality first since 1883**

"RAMSES" Vaginal Jelly is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. The "RAMSES" Diaphragm and Diaphragm Introducer are accepted by the Council on Physical Medicine of the American Medical Association.



# PROMISE... and Performance



Born 1820 ...  
Still going strong



Yes, Johnnie Walker  
always delivers as  
promised. When you  
savour this smoother-  
than-smooth Scotch,  
you always enjoy  
whisky of superlative  
mellowness and rich-  
ness of flavour to the  
very last sip.

RED LABEL

BLACK LABEL

Both 86.8 proof

# JOHNNIE WALKER

BLENDED SCOTCH WHISKY

Canada Dry Ginger Ale, Inc., New York, N. Y.

Sole Importer

(Continued from Page 496)

various costs today. This is entirely erroneous because we are more than anxious that the patients understand every charge that is made.

In the more than two years that we have had a Babies' Alumni Association, during which time more than 8,000 babies have been born in this hospital, yours is the first complaint that we have received directly or indirectly. Every cent that has come in for this Fund has been kept intact for use in building a nursery in our Memorial Maternity Center, and the Fund will never be used for any other purpose than that which is specified.

In answer to your question, "Who are you trying to fool?", I must state emphatically that we are not trying to fool anybody, and that our reports are carefully audited and available for inspection. The very fact that a "non-profit" organization pays no taxes proves that we do not and have not at any time made a profit in our institution; if we did, the City of Detroit, the County of Wayne, the State of Michigan and the Federal Government would at once, logically and rightfully, demand that we pay such taxes.

You compare hospital rates with the room rates at the Book Cadillac where you state that one can secure a room "twin beds and private bath and shower for \$13.00 per day." You are probably right about these hotel rates. I personally do not know as I have never been able to stay at the Book Cadillac. However, a hospital is not a hotel and does not desire to compete with a hotel either in rates or in services.

The amount that a patient pays for his room in a hospital includes three meals a day, served in bed, as well as nourishment between meals if he needs it. It also includes the services of available nurses and doctors twenty-four hours each day, seven days a week whenever the patient needs such services. In a hotel, every time you ring the bell and the bell-boy comes up to render some minor service such as to bring you ice-water, you tip him (we hope) at least 25 cents. Can you imagine what your hospital charges would be if you were required to pay a minimum of 25 cents for each service rendered, for each glass of water which the nurse brings in, for each meal which is served and if we may mention such mundane matters, for each bed pan which is brought in? Any thinking person can see readily why hospital charges cannot be compared with hotel charges in any logical way.

It is true that special services such as those of the x-ray department, the laboratory, the operating rooms and special medicine are charged to the patient, but the main thing to remember is that for all of these the patient does not pay the full cost. In 1948 the per day cost per bed in our institution, which is one of the most economically-run in this area, was \$21.31. In other words, the average patient does not pay his own way in the hospital and is not over-charged for any services.

You ask about the \$2.50 charged for a chest x-ray to determine whether a patient has tuberculosis or any other chest condition, and state that over the radio everyone is urged to have such an examination without any charge. It is true that one can receive such an x-ray examination from certain municipal and state organizations *without charge*, but do not be deceived into thinking that it is *without cost* to you. You and I, as individual taxpayers, pay for all of these "free" services that are rendered either by the city, by the state or by the federal government. If folks would only learn that *nothing is free* and that *everything must be paid for* directly or indirectly, there would not be this clamor from some misguided people for socialized medicine, which will cost the individual *more* than medicine today, where the patient has his own choice of doctor and of hospital.

You suggest that I "try to get into a hospital without

(Continued on Page 500)

# REASONS WHY ..... PELTON

... *should be your choice* when selecting your modern instrument sterilizer. Only in the Pelton will you find such outstanding advances in design, as illustrated here.

These and other important Pelton features have been developed through 50 years of progressive engineering and precision manufacture. They combine to give you a dependable sterilizer of finest quality and performance at an attractive price.

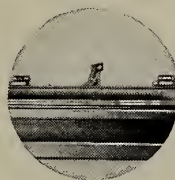
*PELTON instrument sterilizers are available in both portable and cabinet models. See them at your dealer's or write for literature.*



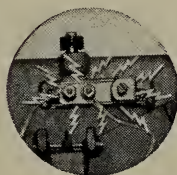
Telechron movement timer optional on most models



Dripless cover diverts the condensate into boiler



Pelton center lift prevents cover from warping



Super-sensitive thermostat assures immediate recovery of sterilizing temperature



"Sentry" cut-off is absolute; consumes no current after being actuated



Cast-bronze boiler slopes; design facilitates drainage and easy cleaning

## PELTON

PROFESSIONAL EQUIPMENT  
SINCE 1900

THE PELTON & CRANE CO., DETROIT 2, MICH.



(Continued from Page 498)

a deposit." May I suggest that you try to get into a theater, a train, or an airplane without a ticket! Emergency cases are accepted without any deposit, but the hospital naturally requires that the cost of planned hospital stay be provided for in advance, either by a cash deposit, or by approved insurance. If the hospital did not have some such system, and had a backlog of unpaid bills that it could not collect, the cost of hospital care would increase appreciably, and *that* is something in which we are all interested.

You compare a bill of 1943 with a bill of 1948 and ask why the cost has increased. The cost has increased because the cost of everything has increased in the past five years. You pay more for the food that you eat, the clothes that you wear, the car that you drive, if you are fortunate enough to buy a car. Your daily newspaper has increased from 3 cents to 5 cents; your *Saturday Evening Post* from 5 cents to 15 cents. Yes, the cost of birth has gone up, the cost of living has gone up and the cost of death too has increased! However, the American citizen today pays less of his earned dollar for medical care, including doctors' fees and hospitalization, than he ever has before. No hospital raises its rates for its services until it absolutely has to, and we regret as much as you do, that hospital costs as well as other costs today are so high.

I am very sorry that I cannot mail this answer to you directly and invite you to come in and see me and have a face-to-face talk about the cost of hospitalization.

Yours very truly,

HARTMAN A. LIGHTWARDT, M.D.  
Medical Director  
Woman's Hospital of Detroit

## Woman's Auxiliary

The Woman's Auxiliary to the American Medical Association will hold its twenty-sixth annual convention in Atlantic City, New Jersey, June 6 to 10, 1949. Had-don Hall will be the headquarters, and requests for reservations should be sent at once to Robert A. Bradley, Chairman, Subcommittee on Hotels, 16 Central Pier, Atlantic City, New Jersey.

The Michigan State Medical Society has generously offered and assigned the services of Miss Larita Jones, Public Relations Field Secretary, to the Woman's Auxiliary. Please feel free to call on her for any help you may need in carrying out the CAP plan, which has been explained in a letter to each county president. An outline for this plan was agreed upon at a meeting held in Grand Rapids, February 17, 1949, with Mr. Hugh Brenneman, Public Relations Counsel, MSMS, Dr. C. Allen Payne, chairman, Advisory Committee to Woman's Auxiliary, Miss Larita Jones, and your president, in attendance.

Your co-operation in the development of these plans is of urgent necessity. I am sure every Auxiliary member will do her best to prove we are worthy of the confidence our parent organization has placed in us.

MRS. W. L. DIXON, President  
MSMS Auxiliary.

## DIGILANID...

*crystalline complex  
of whole leaf*

The dependable action of the total glycosides of *Digitalis lanata* whole leaf is provided by DIGILANID®, crystalline complex of lanatosides A, B and C, in regulated percentages.

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Tablets • Liquid • Ampuls • Suppositories



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## BECAUSE WIDELY APPLICABLE

Ovaltine in milk, a multiple dietary supplement, is eminently useful in preventing malnutrition referable to nutritionally incomplete diets or to restricted food intake. This flavorsome food drink is widely applicable in dietotherapy of illness and convalescence, and for correcting inadequate nutrient intake in persons of all ages.

1. The protein of this delicious food drink—Ovaltine in milk—is of high biologic value, supplies all the indispensable amino acids required for tissue maintenance and growth and other physiologic needs.

2. Its contained vitamins and min-

erals provide excellent amounts of vitamins A and D, ascorbic acid, niacin, riboflavin, thiamine, calcium, copper, iron, and phosphorus.

3. Its carbohydrate energy is promptly available for utilization.

4. Its easy digestibility makes for ready absorption of its valuable nutrients.

5. Its delicious flavor, appealing alike to children, adults, and the aged, makes it acceptable even when other foods may be refused.

6. Its multiple nutrients, in kind and amount, make Ovaltine in milk a highly efficient dietary supplement.

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# Ovaltine

Three servings daily of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk, \* provide:

CALORIES	676	VITAMIN A	3000 I.U.
PROTEIN	32 Gm.	VITAMIN B <sub>1</sub>	1.16 mg.
FAT	32 Gm.	RIBOFLAVIN	2.0 mg.
CARBOHYDRATE	65 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12 mg.	COPPER	0.5 mg.

\*Based on average reported values for milk.



## Your Right-Hand Men...

Mr. S. H. Cummins and Mr. Wm. B. Wood are experts in the field of optical dispensing—backed by a staff of efficient, dependable technicians.

Cummins is fully aware of the importance of creating a feeling of assurance in your patient that he has obtained the utmost in optical service.

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**S**UPPOSE a guest or servant is hurt at your home, or a tradesman is bitten by your dog, or someone is injured while you are playing golf, hunting or fishing, would apologies be enough?

A Comprehensive Personal Liability policy at a very nominal cost, usually for less than \$1 a month, will:

1—Immediately pay medical and hospital bills of persons who are hurt, regardless of whether you are to blame for the injury or not.

2—Provide funds to pay judgments against you, if you should be sued.

3—And pay all court costs and the costs of defending your case, even if the suit should be groundless, false or fraudulent.

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**Whiting and Whiting**

GENERAL INSURANCE  
WOodward 5-3040  
520 FORD BLDG.                      DETROIT 26

## In Memoriam

ALBERT A. HUGHES, M.D., of Detroit was born on September 27, 1876, in Fowlerville, Michigan, and was graduated from the Wayne University College of Medicine in 1911. Doctor Hughes served as Wayne County Coroner for eight terms and was a member of the Wayne County Medical Society, a Life member of the Michigan State Medical Society and a member of the American Medical Association. Doctor Hughes died on January 21, 1949, in Detroit at the age of seventy-two years.

ROBERT GEORGE SHAW, M.D., of Detroit was born in Oxford, England, on February 15, 1866, and at the age of twenty-five, came to Detroit, where he began the study of medicine. He was graduated from the Wayne University College of Medicine in 1907. Doctor Shaw practiced in Detroit and was a member of the staff at St. Mary's Hospital for forty years. He was a member of the Wayne County Medical Society and a Life member of the Michigan State Medical Society. Dr. Shaw died on January 20, 1949, in Detroit at the age of eighty-two years.

J. WALTER VAUGHAN, M.D., of Detroit was born on August 6, 1880, in Mt. Airy, Missouri, and was graduated from the University of Michigan Medical School in 1904. He continued with postgraduate study at the Mayo Clinic, and served as a Lt. Colonel in the 32nd Division Medical Corps during World War I. Dr. Vaughan was on the Faculty of the Wayne University College of Medicine from 1907 to 1917 and was attending surgeon at Harper Hospital from 1914 to 1917. He served as chief surgeon at the Charles Godwin Jennings Hospital, and was a member of the Detroit Board of Health. Doctor Vaughan retired from active practice in 1935 due to ill health, and died on January 21, 1949, in Detroit at the age of sixty-eight years.

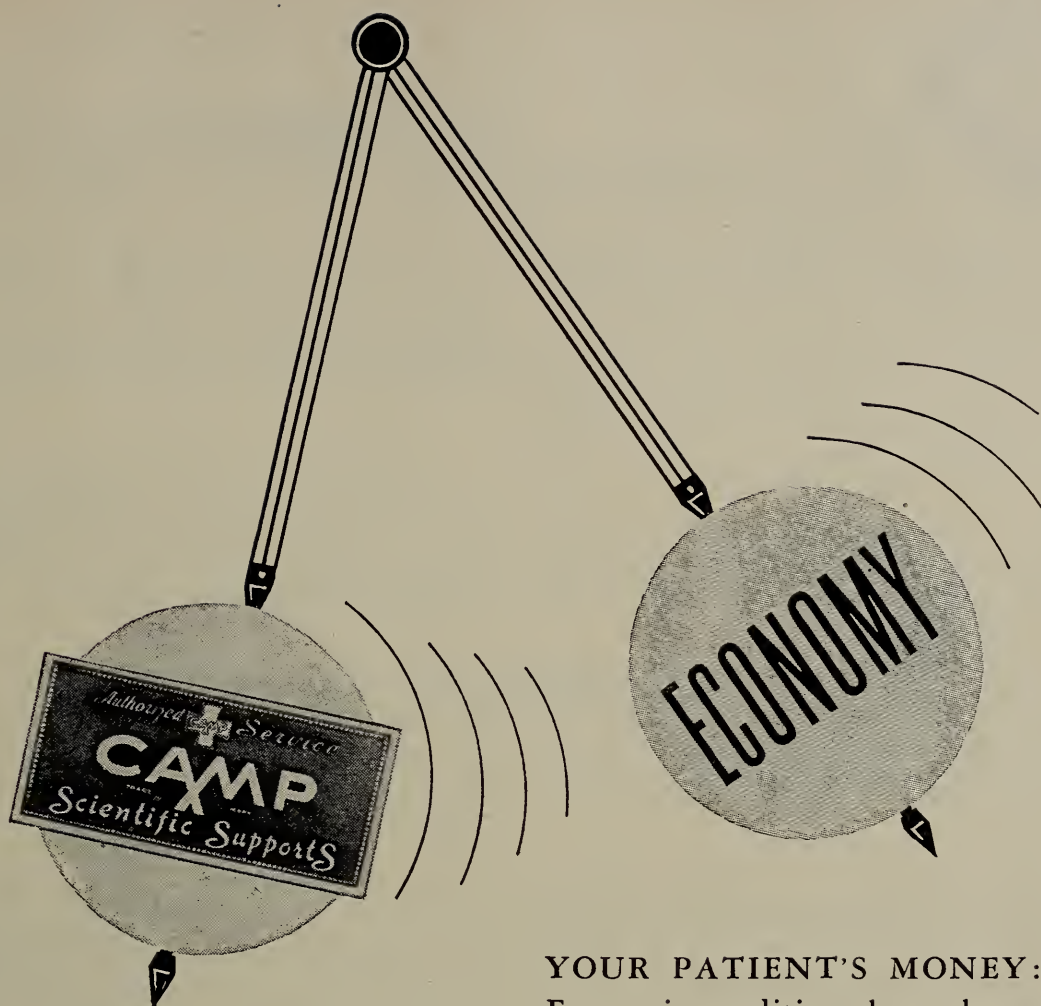
**A**t the request of some of our friends we are installing the latest Sanborn Electrocardiograph Machine.

The results will be interpreted by a well known heart specialist.

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**Physicians' Service  
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CAMP SCIENTIFIC SUPPORTS are prescribed and recommended in many types for prenatal, postnatal, post-operative, pendulous abdomen, visceroptosis, nephroptosis, hernia, orthopedic and other conditions. If you do not have a copy of the Camp "Reference Book for Physicians and Surgeons," it will be sent upon request.

**YOUR PATIENT'S MONEY:**  
Economic conditions have shown many swings during the four decades of CAMP history. But Camp prices have always been conscientiously based on intrinsic value. These moderate prices coupled with the functional efficiency and superb quality of Camp Scientific Supports, long recognized by the profession, mean true economy to the patient.

**S. H. CAMP and COMPANY, JACKSON, MICHIGAN**  
*World's Largest Manufacturers of Scientific Supports*  
Offices in New York • Chicago • Windsor, Ontario • London, England





## NEWS MEDICAL

.....

*Kenneth H. Johnson, M.D.*, Lansing, has been appointed as MSMS representative to the Health Committee of the Michigan Congress of Parents and Teachers.

\* \* \*

*Medical men* now are under a critical microscope where the wrongs or indiscretions of only a few critically affect the good work of many.

\* \* \*

*George Van Rhee, M.D.*, Detroit, has been appointed by President E. F. Sladek, M.D., as a member of the Committee on Uniform Fee Schedule for Governmental Agencies.

\* \* \*

*The Upper Peninsula Medical Society* will hold its annual meeting at Blaney Park, Michigan, June 17-19, 1949. All members of the Michigan State Medical Society are cordially invited to attend this excellent scientific meeting.

\* \* \*

*J. S. DeTar, M.D.*, Milan, Speaker of the House of Delegates of the Michigan State Medical Society, was guest speaker at the annual meeting of the Oregon State Medical Society held in Portland. His presentation on February 22 was "The Michigan CAP Plan."

\* \* \*

*Congratulations to L. R. Keagle, M.D.*, Editor of the *Bulletin of the Calhoun County Medical Society* on his March number, which included a report on the number of pupils having medical examinations at the opening of school during the 1948-49 school year.

\* \* \*

*The International Academy of Proctology* has been chartered in New York State, with charter membership, Associate Fellowship and Fellowship now open. For information, write Alfred J. Cantor, M.D., 43-55 Kissena Boulevard, Flushing, N. Y.

\* \* \*

*The International and Fourth American Congress on Obstetrics and Gynecology* will be held at the Hotel Statler, New York City, May 14-19, 1950. For additional information write Fred L. Adair, M.D., 24 West Ohio St., Chicago 10, Ill.

\* \* \*

*The American Association of Railway Surgeons* will hold its 61st Annual Meeting at the Drake Hotel, Chicago, June 30 to July 2, 1949. For copy of the program, write Chester C. Guy, M.D., Secretary, 5800 Stony Island Ave., Chicago 37, Ill.

*The University of Georgia School of Medicine* has opened the first school of medical illustration in the southeastern United States. Applications may be addressed to The Registrar of the School in Augusta, Georgia.

\* \* \*

*President E. F. Sladek, M.D.*, Traverse City, spoke before the Traverse City Kiwanis Club on February 28 and also to the Central High School Congress of Parents and Teachers, Traverse City, February 22. His subject was "The Voluntary Way is the Safer Way."

\* \* \*

*Congratulations* to the Greater Jackson (Michigan) Association Board of Directors for its resolution against Socialized Medicine. Copies of this resolution have been distributed by the Jackson Association to all Chambers of Commerce in Michigan. This is an action worthy of emulation throughout the State.

\* \* \*

"*The present high standard of health* in this democracy can be maintained and improved only by education and not by any political maneuvering."

Extract from leaflet entitled "Compulsory Sickness Tax" developed by Jackson (Michigan) County Medical Society.

\* \* \*

*The Michigan Foundation for Medical and Health Education, Inc.* is sponsoring the third Michigan Rural Health Conference, scheduled for the Civic Auditorium, Grand Rapids, October 28-29, 1949. Co-sponsors include among some forty groups the Michigan State Medical Society and the Michigan Health Council.

\* \* \*

*The Menominee County Medical Society* was the first to have 100 per cent of its 1949 dues, together with the AMA assessment, paid in full. Close on its heels was the Newaygo County Medical Society, with all members marked paid for their county, state, and national association dues.

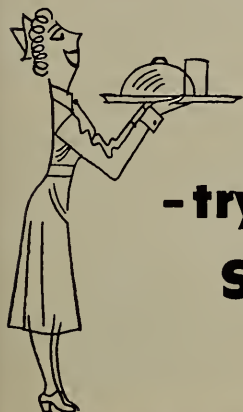
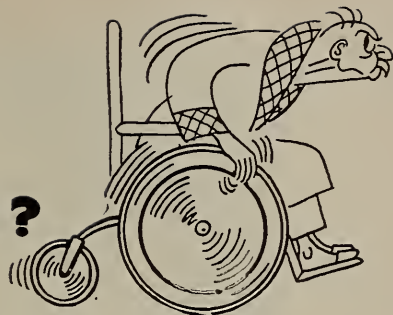
\* \* \*

*Labor and Management*—Labor has announced that this year emphasis will be placed not on wage increases, but on private social security, health, death benefits, old age benefits of \$100.00 a month, and unemployment

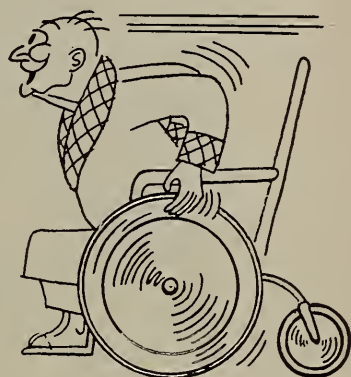
(Continued on Page 506)



**Sick folks sick  
of soft diets?**



**-try tempting  
Swift's Strained Meats!**



**6 varieties:**

**Beef, lamb, pork,  
veal, liver, heart**

The foods soft-diet patients have to eat! No wonder they succumb to appetite-apathy.

But many physicians today have discovered there *is* a way to put appetizing, real meat goodness into soft diets. They recommend Swift's Strained Meats. These specially prepared meats retain all their palatability, and a maximum of nutrient value in a form that's highly digestible—easy to eat. To vary patients' menus, Swift's Strained Meats offer six different

varieties. Convenient—ready to serve.

Nutritionally, Swift's Strained Meats provide an excellent base for a high-protein, low-residue diet. A rich source of complete, high-quality proteins, they make available simultaneously all known essential amino acids—for optimum protein synthesis. In addition, Swift's Strained Meats supply hemapoeitic iron and goodly amounts of B vitamins. Let Swift's Strained Meats help overcome anorexia in your soft-diet patients!

*The makers of Swift's Strained Meats invite you to send for the new physicians' handbook of protein feeding, written by a doctor, "The Importance of Protein Foods in Health and Disease." Send to:*

**SWIFT & COMPANY**

Chicago 9, Illinois



*All nutritional statements made in this advertisement are accepted by the Council on Foods and Nutrition of the American Medical Association.*



For patients who can take foods of less fine consistency—Swift's Diced Meats offer tender morsels of nutritious meats with tempting flavors patients appreciate.



(Continued from Page 504)

benefits. These are to be paid by management, and failing this, government will be pressured into something more than the old Wagner-Murray-Dingell Bill.

\* \* \*

O. B. McGillicuddy, M.D., Lansing, addressed the Lansing Citizens Club on March 7. His subject was "The Voluntary Way is the American Way." He and L. A. Drolett, M.D., Lansing, spoke to the Lansing Chamber of Commerce on "Socialized Medicine" on March 16.

\* \* \*

*The Detroit Medical News*, weekly publication of the Wayne County Medical Society, temporarily is withdrawing certain of its regular departments to provide space for weekly published articles pertinent to the education program of the Michigan State Medical Society. These articles are being prepared by the Public Relations Department, MSMS.

\* \* \*

*Federal medicine by degrees*—"In 1948 more than forty-four federal agencies spent \$1,250,000,000.00 for health and medical services. In 1949 the Veterans Administration alone will spend as much as all the federal agencies did in 1948, and one-half of this will be for construction of new hospitals. The federal government now assumes a varying degree of care for some 24,000,000 persons, about one-sixth of the population." Hoover Commission Report, December 26, 1948.

*The American Board of Preventive Medicine and Public Health, Inc.*, was approved by the Advisory Board for Medical Specialties and by the Council on Medical Education and Hospitals of the AMA on February 6, 1949. For requirements of certification and applications for the Founders Group, write Ernest L. Stebbins, M.D., Secretary-Treasurer, 615 N. Wolfe, Baltimore 5, Md.

\* \* \*

*The American Academy of General Practice* held a most successful first annual assembly in the Netherland Plaza Hotel, Cincinnati, Ohio, March 7, 8 and 9, 1949. The total registration was 3,506, of which 2,539 were doctors of medicine.

E. C. Texter, M.D., Detroit, assumed the presidency of the AAGP at its Cincinnati meeting. Scores of Michigan physicians attended the Assembly.

The 1950 AAGP Assembly will be held in St. Louis, Mo., February 23, 24, 25.

\* \* \*

*Saginaw* paid fitting tribute to Martha Longstreet, M.D., its "beloved physician," upon her recent retirement from active practice at the age of seventy-eight.

*The Saginaw Daily News* began its splendid story on Saginaw's pediatrician of three generations with these words "Saginaw, however reluctant, somehow will have to down the first bitter pill ever to come from the worn black bag of its famous Dr. Martha Longstreet. She has retired to end a matchless career in Michigan medicine."

(Continued on Page 508)

# for Fifty Years

## PROFESSIONAL PROTECTION EXCLUSIVELY

THE  
**MEDICAL PROTECTIVE COMPANY**  
FORT WAYNE, INDIANA

DETROIT Office: George A. Triplett, A. G. Schulz and Richard K. Wind, Representatives  
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Wouldn't you like to get rid of dusty vacuum bags forever? Wouldn't you like to pour dust away as easily as dirty dishwater?

You can, with Rexair—the amazing new home appliance that washes your dust away. Rexair collects dust in water; you just pour the water down the drain and flush—dust and dirt go with it.

When you clean with Rexair, you clean *clean*. Rexair has no porous bag through which dust can escape back into the air you breathe. Instead, the air passes through a churning bath of water which wets down the dust and returns only dust-free air to the room. Wet dust cannot fly, and dust cannot escape from Rexair's water basin.

Rexair washes the air in your home, humidifies, vaporizes medicaments, even scrubs floors. See the Rexair before you buy a humidifier, a vaporizer, or even a vacuum cleaner. Over 1,000,000 in use.



**FREE BOOK:** Send for this free, illustrated 12-page book. Shows how Rexair even cleans the air you breathe. **REXAIR DIVISION, MARTIN-PARRY CORP.** Box 964, Toledo 1, Ohio, Dept. F-49

## Rexair



## A GUARANTEED INCOME For Professional Men Against Disability

Due to Accidents, Sickness, Total Disability,  
Accidental Death and Loss of Hands, Feet or Eyes

**NO CANCELLATION CLAUSE,** (Standard Provision #16)

**NO TERMINATING AGE,** (Standard Provision #20)

**& GUARANTEED RENEWABLE FEATURES PROVIDED**

**FIRST DAY TO LIFETIME BENEFITS**

**DISABILITIES OCCURRING PRIOR TO AGE 60**

**Accidents or Confining Sickness**

*When Hospital Confined*

**\$ 800** first month benefit

**\$1000** second month benefit

**\$1000** third month benefit

*When Not Hospital Confined*

**\$400** monthly 1st year (**\$200** 1st month)

**\$400** monthly 2nd year

**\$300** monthly thereafter for life

**DISABILITIES OCCURRING AFTER AGE 60—\$100** less 1st year after 1st month and **\$150** less thereafter exclusive of Hospital Benefits.

**Non Pro-Rating**

**Non-Assessable**

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PROFESSIONAL GROUP DEPT., *Intermediate Division*

**30 E. ADAMS, CHICAGO 3, ILL.**



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Over the years, Kilgore and Hurd has become a name that stands for "the unusual" in the art of dressing correctly.

It stands for the roll of a lapel or the soft-front construction of our coats . . . or the smart "set" of our shirt collars . . . for distinguished patterns in neckwear . . . for hand-lasting in our English shoes . . . for the cut and fabric of everything you see here.

We establish . . . and we *maintain* our own standards of Good Taste in apparel!

SPRING APPAREL  
for GENTLEMEN

**KILGORE and HURD**

1259 WASHINGTON BLVD. IN THE BOOK TOWER

DETROIT 26, MICHIGAN

(Continued from Page 506)

*Congratulations to the Saturday Evening Post* on its excellent editorial in the January 22 number, entitled "State Medicine Hasn't Worked Any Miracles." We especially like the closing paragraph which states: "It seems to us that Congress, instead of swallowing whole hog what the social-worker bloc and the CIO-PAC and louder irresponsibles in politics think about the practice of medicine, might consult the doctors. They might at least enlighten us on just how 180,000 medical men are going to do the work of 500,000 medical men who will be needed when pills and poultices are free, merely by taking their orders from social workers and federal job holders."

\* \* \*

The Michigan Heart Association, sponsored by the Michigan State Medical Society, was incorporated February 17, 1949.

The officers of the newly created Heart Association in Michigan are as follows: W. B. Cooksey, M.D., Detroit, president; C. E. Wilson, Detroit, chairman of the Board; P. S. Barker, M.D., Ann Arbor, president-elect; Mrs. Bethany L. Wilson, Ann Arbor, first vice president; Frank Van Schoick, M.D., Jackson, second vice president; C. T. Fisher, Jr., Detroit, treasurer; and, L. Fernald Foster, M.D., Bay City, secretary.

\* \* \*

*Doctor*, when you peruse the advertising pages in our JOURNAL, remember this: all ads are carefully screened—the items, services, and messages presented are committee-accepted. Our standards are of the highest. The advertisers like our journal—that's why they selected it for use in their promotional program. They seek your patronage and your response encourages continued use of our publication. In turn, the advertisers' patronage helps us to produce a journal that is second to none in our state. When you send inquiries, tell them that you read their advertisement in JMSMS.

\* \* \*

## Interesting Statistics.—

Income Class	Estimated 1948 (individuals)	Actual 1938 (individuals)
\$ 3,000-\$ 5,000	8,263,000	1,172,409
5,000- 10,000	1,463,200	415,596
10,000- 25,000	608,100	140,781
25,000- 50,000	149,500	26,336
50,000- 100,000	51,400	7,259
100,000- 500,000	11,600	2,299
500,000- 1,000,000	300	118
1,000,000 and over	100	37

—Sales Management, December, 1948

\* \* \*

Broken fluorescent light tubes are dangerous because they are coated with a powder called "phosphor." This phosphor powder causes the tubes to fluoresce or glow. Phosphors normally contain beryllium and small amounts of mercury. These two substances are very toxic. Great caution should be exercised in handling and disposing

(Continued on Page 510)



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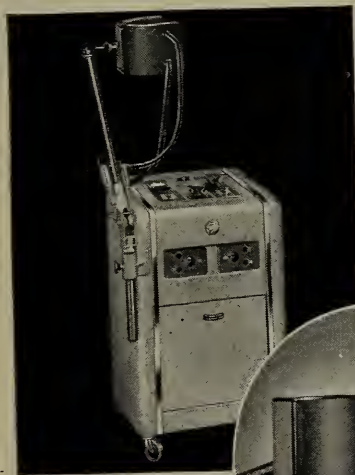
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Do not overlook the fact that in addition to meeting the rigid requirements for *four* types of approval, H. G. Fischer & Co.'s De Luxe Cabinet Model "400" Short Wave Diathermy Unit is equipped with the new *patented, adjustable induction electrode*. This new contour designed electrode curves to fit body surfaces, making applications to the back, hip or shoulders simple and quick, with even distribution of heat over the entire treatment area. Other important features are: (1) Self-excited oscillator type—no crystal control or master oscillator; (2) permits minor electrosurgery and any degree of electrocoagulation.

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**TESTS** demonstrate: high biological value in growth studies; all recognized essential amino acids provided in significant quantities.

**TASTE** and adaptability to a variety of vehicles ensure patient-acceptance.

Particularly valuable when the patient has difficulty in utilizing adequate amounts of protein from natural food sources such as may occur at times in pregnancy and lactation, gastrointestinal disorders, convalescence, diarrhea in children, chronic malnutrition, and in aged patients.



**THE ARLINGTON CHEMICAL COMPANY**  
**YONKERS 1 NEW YORK**

(Continued from Page 508)

of the broken glass. Beryllium, if introduced under the skin, will cause delay in healing, chronic inflammation and may produce painful tumor formations at the site of the cut.

Patients should be warned to be most careful in the disposal of fluorescent light tubes.

\* \* \*

**Federal Taxes**—Seventy-six cents of every tax dollar for the Federal Government goes for some type of war expense: The military, army, navy, et cetera, \$0.34; foreign aid as result of war, \$0.16; war Veterans, \$0.13; interest on war debts, \$0.13. This leaves only \$0.24 left for all other expenses of Government. This tax dollar comes from individual incomes, \$0.43; corporation taxes, \$0.28; excise taxes from individuals, \$0.19; customs and miscellaneous sources \$0.10. The people pay seventy-two per cent of every tax dollar. Most of this comes from the income levels of \$3,000 to \$6,000, because they are by far the most in numbers.

\* \* \*

Secretary L. Fernald Foster, M.D., Bay City, spoke before the Kalamazoo Academy of Medicine on February 15, on "Socialized Medicine"—the A. W. Crane Memorial Lecture; the Calhoun County Medical Society, February 1, on "The Impracticities of Medicine"; the Bay County Office Assistants on March 9, "Voluntary vs. Compulsory Health Insurance"; the Shiawassee County Medical So-

ciety, March 10, "The Impracticities of Medicine"; the Alpena County Medical Society, March 18, "Our Public Relations"; the Washington P.T.A., Bay City, March 22, "Compulsory Health Insurance and the Ewing Report"; and the Sebawaing Chamber of Commerce on March 28, "The National Health Program."

\* \* \*

*Congratulations to the Bay-Arenac-Iosco County Medical Society on the appearance of its Bulletin.* The March, 1949, issue was Volume 1, Number 1, and made its debut under the editorship of F. Pitken Husted, M.D., with Orlen J. Johnson, M.D., as editor for the month. Other members of the Bulletin Committee are Robert E. Fisher, M.D., Associate Editor, Orlen J. Johnson, M.D., Associate Editor, Harold C. Shafer, M.D., Associate Editor, and Culver Jones, M.D., Associate Editor.

Officers of the Society for 1949 are Edwin C. Miller, M.D., president, D. J. Mosier, M.D., president elect, L. Fernald Foster, M.D., secretary-treasurer.

The news notes in the Bay-Arenac-Iosco *Bulletin* are listed under the intriguing title "Dope"!

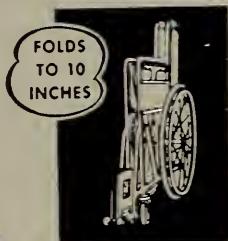
\* \* \*

*Michigan Medical authors* include the following: H. Thomas Ballantine, Jr., M.D., Boston, and Francis X. Byron, M.D., Ann Arbor—"Carcinoma of the Lung with Intracranial Metastasis: Successful Removal of Me-

(Continued on Page 512)

# E & J Folding WHEEL CHAIRS

Used by thousands for  
TRAVEL, WORK, PLAY



FOLDS  
TO 10  
INCHES

Everest & Jennings folding Wheel Chairs are  
LIGHTEST AND STRONGEST of all!  
They fold compactly for travel, work, play.  
Beautifully designed of chromium plated  
tubular steel. Insist on a genuine E & J Light-  
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(Continued from Page 510)

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\* \* \*

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1. Bay County Medical Society News Letter—F. P. HUSTED, M.D., 1100 Fifth Ave., Bay City, Michigan
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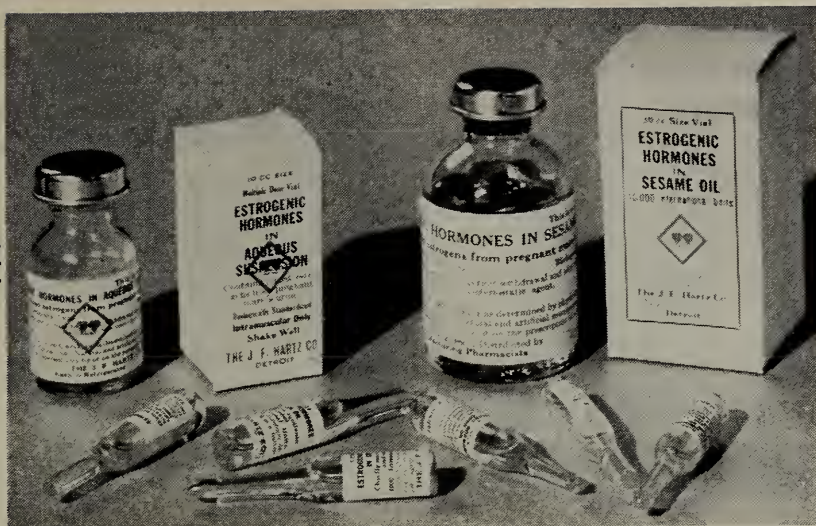
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## HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of March 16, 1949

- The Executive Committee, adopting its new "all-day session" schedule, was in session from 10:15 a.m. to 10:05 p.m.
- Monthly financial reports and bills payable were presented, studied, and approved.
- Michigan Hospital Service reported on enrollment of doctors of medicine and of their office secretaries. Representatives of MHS will endeavor to appear before county medical societies of Michigan this year to explain the service of MHS in an attempt to gain a better enrollment; after May 1, 1949 the enrollment of doctors and their office secretaries will be closed for an indefinite time.
- The Executive Committee of The Council held a joint session with the Board of Governors of the State Bar of Michigan and discussed mutual problems.
- Committee reports were approved from the Cancer Control Committee, Mental Hygiene Committee, Public Relations Field Secretaries meeting, Permanent Conference Committee, Legislative Committee (and Committee of Six), Special Committee on Immunization, Special Committee on Education, Rural Health Committee, Committee on Emergency Medical Service, and item from the Chairman of the Committee on Postgraduate Medical Education concerning new extramural centers and programs.
- Increase in number of medical students. The Executive Committee favored the introduction of a resolution into the Michigan Legislature, at the 1949 session, urging greatly increased appropriations for medical education in Michigan's two medical schools, to aid in increasing the number of medical students in this state.
- Grants-in-aid to patients for payment of part of medical bill. This plan was devised and explained by John R. Rodger, M.D., of Bellaire, as an alternative to Senate 5 (Wagner-Murray-Dingell Bill). This proposal and charts were referred to the Special Committee on Education. Mr. Stuart Haden, Washington, D. C., reported that proponents of sickness insurance were running into opposition from tax-conscious U. S. Senators and Congressmen and that this question is now one of economic considerations.
- The Public Relations Counsel's monthly report was presented and approved, including authorization to print a special pamphlet for women (120,000 copies).
- R. V. Walker, M.D., Detroit and Walter Gries, Ishpeming, were recommended to the Governor for reappointment to the Michigan Crippled Children Commission and to the State Social Welfare Commission, respectively.
- The personnel of the 1950 Committee on Arrangements for the Michigan Postgraduate Clinical Institute (March, 1950), as appointed by President Elect W. E. Barstow, M.D., were approved.
- O. O. Beck, M.D., Birmingham, and R. L. Novy, M.D., Detroit, were nominated to succeed themselves on the Board of Trustees of Michigan Hospital Service.
- Medical Library Service: the report of H. H. Cummings, M.D., Ann Arbor and of the Librarian of the University of Michigan Medical Library were ordered incorporated in the Annual Report of The Council to be presented to the House of Delegates in September, 1949.
- Burton R. Laraway, Carl N. Saunders, and Mrs. Hall Blanchard, all of Jackson, nominated by the Jackson County Medical Society for Service Awards, were each granted Award No. II, upon recommendation of the MSMS Committee on Awards. These awards will be presented at the Jackson County Medical Society meeting of April 28.
- Granville J. Coller, M.D. was granted Award No. III, to be presented at the Michigan Postgraduate Clinical Institute on March 24, upon recommendation of the MSMS Committee on Awards.

(Continued on Page 530)



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*(Continued from Page 528)*

## HOOVER COMMISSION FINDINGS ON MEDICAL ACTIVITIES

After reading the Hoover Commission Report on Federal Medical Activities, one cannot help wondering what would happen if Uncle Sam would take over supervision of everybody's health under some sort of nation-wide program.

The Commission paints a dismal picture of present government services in the field of medical care, public health, and medical research. It declares that "the government is moving into uncalculated obligations without an understanding of their ultimate costs, of the lack of professional men who are available, and of the adverse effect upon the hospital system of the country."

Already, twenty-four million persons—or about one-sixth of the population—are already receiving direct care from Uncle Sam. These services are administered by more than forty governmental agencies, and they will cost nearly two billion dollars in the fiscal year—ten times the figure for 1940 (80% of this figure is accounted for by veterans and the armed forces).

Less than 4 per cent of the expenditures are for research, yet research can find new means of preventing disease and is the best possible way of protecting the nation's health.

Federal hospital construction is too costly. It varies from twenty thousand dollars per bed in the larger hospitals to fifty-one thousand per bed in the smaller ones. This compares with an estimated sixteen thousand per bed in voluntary hospitals.

*While great new construction programs are going ahead, there is room to spare in existing federal hospitals.* On June 30, 1949, there were only one-hundred fifty-five thousand patients in hospitals with a capacity for two-hundred and fifty-five thousand.

Construction is far out-running available man power. In the Veterans Administration alone, fifty-six hundred beds are now closed because of inability to service them, yet the V.A. has contracted for fifteen thousand additional beds and is planning for twenty-five thousand more on top of that!

The Hoover Commission's summary brings up other criticisms of waste, overlapping between private and government activities, and lack of coordinated planning.

## New Agency Recommended

The Commission recommends establishment of a United Medical Administration, headed by an Administrator and three Assistant Administrators, appointed by the President with the advice and consent of Congress.

To assist the Administrator, the majority of the Commission recommended the appointment of an Advisory Board made up of the Surgeons General of the Army and Navy, the Air Surgeon, and the Administrator of Veterans Affairs or his representative.

In a further recommendation, the Hoover Report urged that the present inconsistency in policy between the Federal Hospital Construction Program and federal aid to non-federal hospitals under the Hill-Burton Act be ended; further it recommended that a Survey be made to determine the needs for emergency aid to medical schools.

The Commission brought out that medical care offered by the federal government should be a model for the nation—but that objective cannot be obtained under present methods.

The report ends with this statement: "*The highest priority should be given to research, preventive medicine, public health and education.*"

## VACANCIES IN MEDICAL SERVICE CORPS

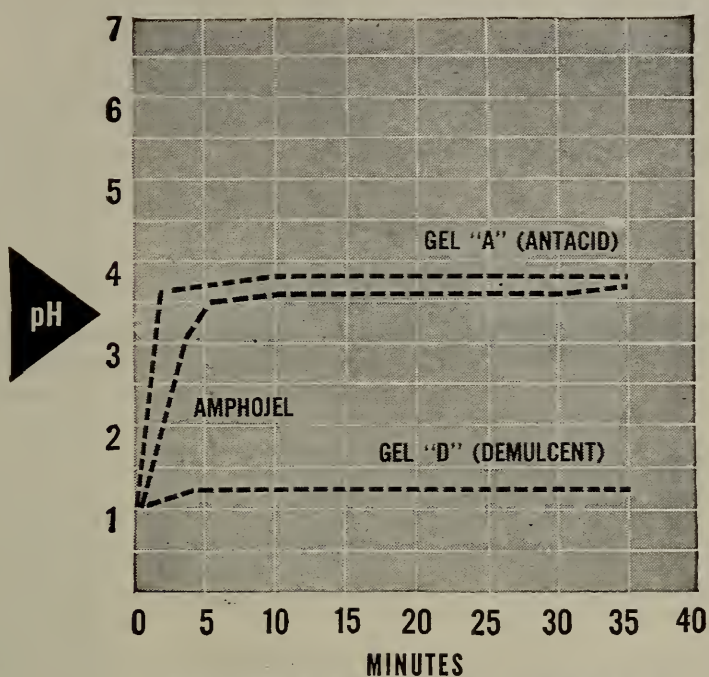
The Army Medical Service Corps still has a number of vacancies in the grades of 2nd and 1st lieutenants in the following specialties: bacteriology, biochemistry, parasitology, serology, entomology, nutrition, toxicology, industrial hygiene, industrial hygiene engineer, optometry, psychiatric social worker, clinical psychology and sanitary engineer under the provisions of Department of Army Circular 210 dated July 14 1948.

Although most of the provisions of Circular 210 were suspended as of February 15, 1949, pending completion by the Department of the Army of a study of remaining requirements, applications for reserve commissions in most grades are still being accepted by the Medical, Dental, Veterinary, Nurse, and Women's Medical Specialist Corps as well as by the Medical Service Corps for appointment in the grades of 2nd and 1st lieutenants.

## STATE HOSPITAL NEEDS AIRED BY SENATE

Does Michigan need two new Veterans' Hospitals? Or does it need more civilian hospitals to which veterans could be admitted as VA patients?

*(Continued on Page 532)*



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# STATE HOSPITAL NEEDS AIRED BY SENATE

(Continued from Page 530)

Veteran organizations, aided by a number of members of Congress, are backing a Congressional drive to restore to the 1949-50 Federal budget funds for construction of 16,000 VA hospital beds.

Included in the construction list are a 500-bed tuberculosis hospital at Detroit, and a 200-bed medical and surgical hospital at Grand Rapids.

\* \* \*

In Michigan the Michigan Hospital Association has developed a plan for orderly expansion of general hospital facilities.

The plan has state legislative approval. It calls eventually for hospital facilities within 30 miles of every Michigan resident.

In Michigan, also, veterans with service-connected disabilities enjoy a unique service. They may obtain hospital care from civilian hospitals under the Blue Cross plan, with the Government paying for the service rendered.

\* \* \*

From the Federal government's standpoint, this substitutes a system of buying medical service, for its general system of building, equipping, and operating hospitals to give veterans service.

The Michigan Hospital Association suggests that the Veterans Administration extend its subscription to the Blue Cross plan to cover all veterans.

Testimony at a recent Senate hearing brought out some sharp contrasts. The questions discussed are important to every Michigan resident.

The policies worked out will in the long run affect the amount and kind of hospital service provided in the State for civilians as well as vets.

\* \* \*

It was testified that Michigan has one VA bed for every 197 veterans, compared to a national average of one for 147, and an average, if the two lost hospitals are restored and built, of one for every 168 veterans in Michigan.

There are 3,623 beds in four VA hospitals—1,100 at Dearborn, 175 at Detroit Marine, 200 at Percy Jones in Battle Creek, and 2,148 at Neuropsychiatric hospital, Battle Creek.

There are 1,000 beds being built—500 at Ann Arbor, 250 at Saginaw, and 250 at Iron Mountain.

The State hospital plan aims at a maximum goal of 4.5 beds for each 1,000 population. If only half the State's 885,000 vets are potential customers for free VA hospital care, the VA already provides or is building more than 4.5 beds for each 1,000 veterans.

\* \* \*

Hospital facilities for veterans are concentrated at Dearborn and Battle Creek.

It was testified that they ought to be located as close to the homes of veterans as possible. Hence the program for small hospitals at Iron Mountain, Saginaw, and Grand Rapids.

The Michigan Hospital Association says this is true, and admitting veterans to civilian hospitals at Federal cost would be still better. That would be a way to put hospital service within 30 miles of every veteran.

Many VA facilities have been built in relatively remote areas, but the present Administration is building them in centers of population, with the idea of drawing on civilian physicians and surgeons in private practice for staff.

\* \* \*

The MHA says this would be even further developed, if veterans went to civilian hospitals like other local residents.

The MHA says that VA hospitals keep patients longer than civilian hospitals. It cites this comparison:

	Civilian	VA
Appendectomy .....	7.8 days	11.2 days
Tonsillectomy .....	1.8 days	8 days
Hemorrhoidectomy .....	6.9 days	16.1 days

VA says that tuberculosis patients needing long hospital care hesitate to go far away from their homes.

They tend to leave VA hospitals before physicians consent, out of lonesomeness and boredom.

Despondency due to separation from family and friends delays recovery, VA says.

Four hundred Michigan veterans are tuberculosis patients in VA facilities outside the State. Many other veterans needing tuberculosis treatment are not seeking it because of lack of VA facilities in Michigan.

\* \* \*

The MHA agrees to this and advances it as an argument for supporting veterans in the tuberculosis hospitals in the state.

The MHA says, however, that care of tuberculosis is shifting and that new facilities are being built as adjuncts to general hospitals.

Where the general staff is available for treatment of tuberculosis in earlier stages it is becoming "more and more a general hospital problem like any other acute disease," MHA says.

With tuberculosis a disappearing disease, there is also a problem of what use can be made of tuberculosis sanatoria later on, MHA suggested.

\* \* \*

For these reasons the MHA recommends that the VA build the Detroit tuberculosis facilities as additions to general hospitals.

It also recommends that Grand Rapids facilities be built as additions to the Grand Rapids general hospitals.

The Senate testimony also revealed that the Percy Jones hospital at Battle Creek has 1,500 empty beds the Army is keeping in stand-by condition.

The State pays half the cost of the Michigan Veterans Facility at Grand Rapids, with 1,050 beds for domiciliary care and temporary hospitalization of veterans, wives or widows.

\* \* \*

A Veterans Readjustment Center at Ann Arbor provides medical, psychiatric and vocational assistance to 500 vets a year.

The Michigan Veterans Benefit Trust Fund provides emergency hospital care through local veterans committees.

The Veterans Vocational school at Kalamazoo is a rehabilitation center serving 200 vets a year.—JAMES M. HASWELL, in *Detroit Free Press*.

(Continued on Page 534)



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(Continued from Page 532)

## REORGANIZATION OF ARMY HOSPITALS TO CONSERVE MEDICAL PERSONNEL

Major General Raymond W. Bliss, The Surgeon General of the Army, announced the proposed streamlining of wartime military hospitals in overseas theaters, to effect greater economy in the use of personnel in scarce professional categories.

The proposed new organization is the result of an intensive study of the experiences of the Army Medical Department in overseas theaters during combat. The main wartime obstacle to be overcome was the lack of flexibility in utilization of professional personnel inherent in the older and more rigid Table of Organization and Equipment concept, under which equipment and personnel, both professional and non-professional, were welded together as a unit. This concept required larger numbers of professional personnel and was responsible for much enforced idleness during the war. The proposed plan markedly reduces the number and type of medical organizations, and authorizes a split between equipment and administrative (or non-professional personnel) on the one hand, and professional personnel on the other.

Under the new plan, which has the approval in principle of the General Staff, the "professional complement," as it will be called, will not join the unit until the last practical moment. In this way, the personnel in scarce categories will be available for use at other installations, or may even remain longer in the civilian community, until the time when they are actually needed with their parent unit.

"The idleness of valuable personnel had serious effects," General Bliss stated. "These professional men and women were not being used economically. More physicians, dentists, nurses, and others were called into the service than necessary, creating a shortage in the civilian economy and adversely affecting morale in civilian as well as military medical circles."

Final details are being completed and will be field-tested in the near future. It is expected that there will be more units consisting of equipment and administrative personnel than there will be professional complements. It is planned that the professional complements, once their duties in a hospital have been completed and the patients evacuated, will move as a team to another hospital unit which has been made ready in a more forward area of the combat zone. Professional complements will be further augmented by specialist teams as required. This will likewise contribute to greater utilization of specialists.

## G.O.P. RESOLUTION AGAINST SOCIALIZED MEDICINE

Following is the text of the resolution adopted February 19, 1949, by the Republican Convention of Michigan in Grand Rapids:

"Socialized Medicine is not the answer to the country's health problems. Our medical and health problems will be better solved by enabling more qualified individuals to train for the medical profession, by lifting educational bars to racial minorities so that they may participate in medical and dental training and practice, by relaxation of federal taxation so that the states may handle their responsibility in this connection, and by the spread of private health service plans."

## LEGISLATIVE ACTION TO INCREASE NUMBER OF MEDICAL STUDENTS

On April 6, Senator Harold D. Tripp introduced the following Senate Concurrent Resolution:

"WHEREAS, it is deemed by the Michigan State Medical Society that facilities at the University of Michigan Medical School and at Wayne University College of Medicine are taxed to the fullest capacity twelve months of the year, and

"WHEREAS, the need is definitely shown for increasing facilities for medical students at the University of Michigan Medical School and at Wayne University College of Medicine, so that sufficient students can be accepted in the medical schools of the State to enter the medical profession and relieve the long-felt shortage of physicians in the rural communities of this State; therefore, be it

"RESOLVED: That the members of the Legislature of the State of Michigan, the Senate and House Concurring, give extra consideration to an appropriation for the purpose of increasing facilities for the medical students at the University of Michigan Medical School and at Wayne University College of Medicine."

This action was taken in accordance with the resolution passed by the 1948 MSMS House of Delegates.

## TEN REASONS WHY COMPULSORY SOCIALIZED MEDICINE IS BAD FOR THE PEOPLE

*Compulsory Political Medicine Will:*

1. Increase your taxes.
2. Lower the present high quality of medical care.
3. Take away privacy between you and your Doctor.
4. Give less and cost more.
5. Create a demand impossible to fulfill.
6. Place a politician between you and your physician.
7. Kill tax-paying private enterprises (such as the health and accident insurance industry).
8. Eliminate voluntary American efforts (such as private hospitals, Blue Cross).
9. Impose more federal controls and red tape on you.
10. Make way for general State Socialism.



### for Constipated Babies

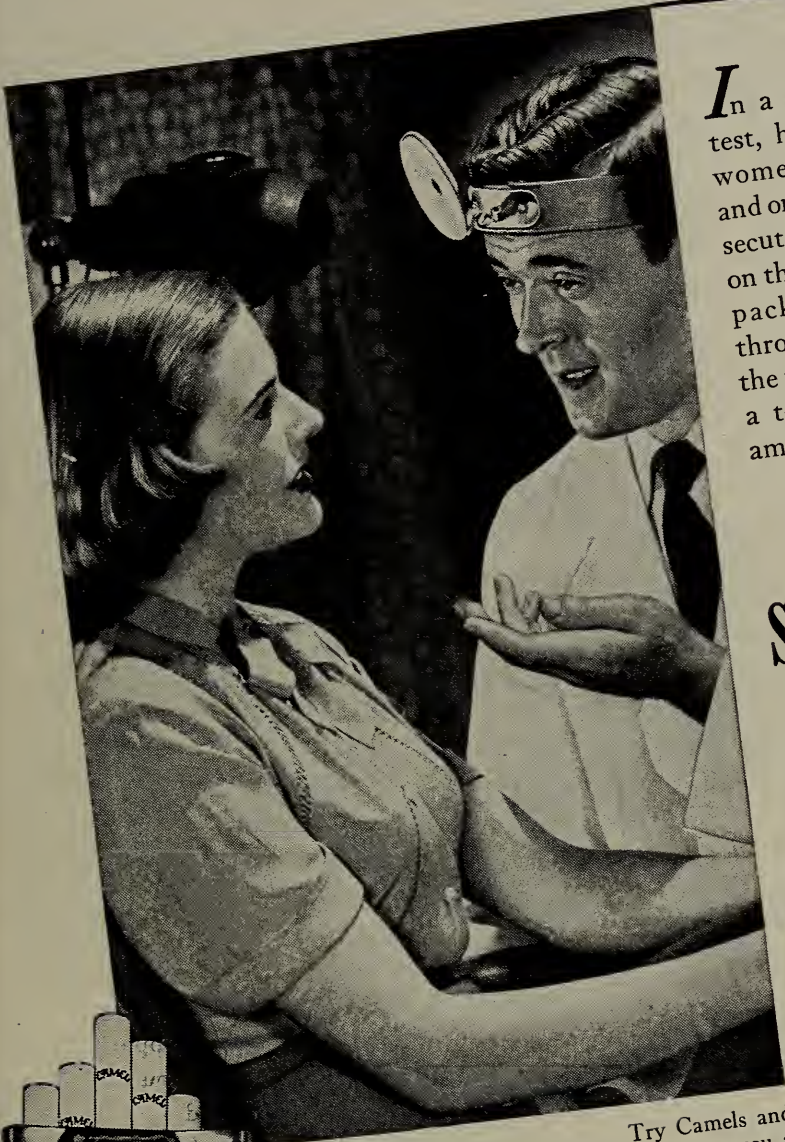
Borcherdt's Malt Soup Extract is a laxative modifier of milk. One or two teaspoonfuls in a single feeding produce a marked change in the stool. Council Accepted. Send for sample.



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# Here's what throat specialists reported about Camel Mildness—



*In* a recent coast-to-coast test, hundreds of men and women smoked Camels—and only Camels—for 30 consecutive days. They smoked on the average of one to two packs a day. Each week throat specialists examined the throats of these smokers, a total of 2470 careful examinations, and reported

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SINGLE CASE  
OF THROAT  
IRRITATION  
due to smoking  
CAMELS”**

*Money-Back  
Guarantee!*

Try Camels and test them as you smoke them. If, at any time, you are not convinced that Camels are the mildest cigarette you've ever smoked, return the package with the unused Camels and we will refund its full purchase price, plus postage. (Signed) R. J. Reynolds Tobacco Company, Winston-Salem, North Carolina.



*According to a Nationwide survey:*

**MORE DOCTORS SMOKE CAMELS**  
*than any other cigarette*

Doctors smoke for pleasure, too! And when three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camell



# Cancer Comment

## CANCER NOSTRUMS AND QUACKERY

Practically every physician is called on during his professional life to pass judgment on some unorthodox "cancer cure." While many of the advocates of these "cures" are outright quacks preying on the gullibility of the public in general and especially of the cancer patient and his friends, some believe sincerely in the merits of their treatment.

What such persons do not understand is that there are certain scientific criteria all therapeutic measures must meet to be recognized as of value in the treatment of cancer. Because of this misunderstanding often they will interpret the physician's lack of acceptance of the product or method at face value as evidence of hostility toward all suggestions emanating from nonmedical sources rather than as a desire to protect the public from untried and worthless methods of treatment.

To show something of the great abundance of so-called "cancer cures," several years ago the sum of \$50,000 was offered through the agency of the American Cancer Society for a remedy other than surgery, x-ray or radium, that would meet the scientific requirements of curing a histologically proved cancer for a period of five years. More than 1,500 "cures" were submitted, none of which met the simple requirements of the offer.

The increased tempo of lay cancer education has brought many of these "cures" to public notice. Realizing that there should be some impartial institution of recognized scientific standing to which the advocates of unusual methods of treatment could be referred for an evaluation of their method or product, the U. S. Public Health Service set up a laboratory in the National Cancer Institute at Bethesda, Maryland, for the examination of such "cancer cures" as might be offered. Among the remedies were salves and pastes of every description, potions made from rattlesnake oil, boiled red top clover, "roman salad," egg yolk and salt, sheep sorrel, castor oil and carrots, and serum from many sources, the most unusual of which was octopus fluid.

The National Cancer Institute has established three conditions to which all materials for examination must conform:

1. The method of treatment must be explained fully. There must be no secrecy whatsoever in regard to its composition or nature.
2. Complete clinical records must be submitted of a suitable number of cancer patients treated with the remedy or method in question under competent medical supervision, and in such a case the diagnosis of cancer must rest on competent and verifiable microscopic examination.
3. The records must show that the patients survived at least five years after treatment.

Needless to say, none of the claims for a cure so far submitted has stood up under the three conditions noted above.

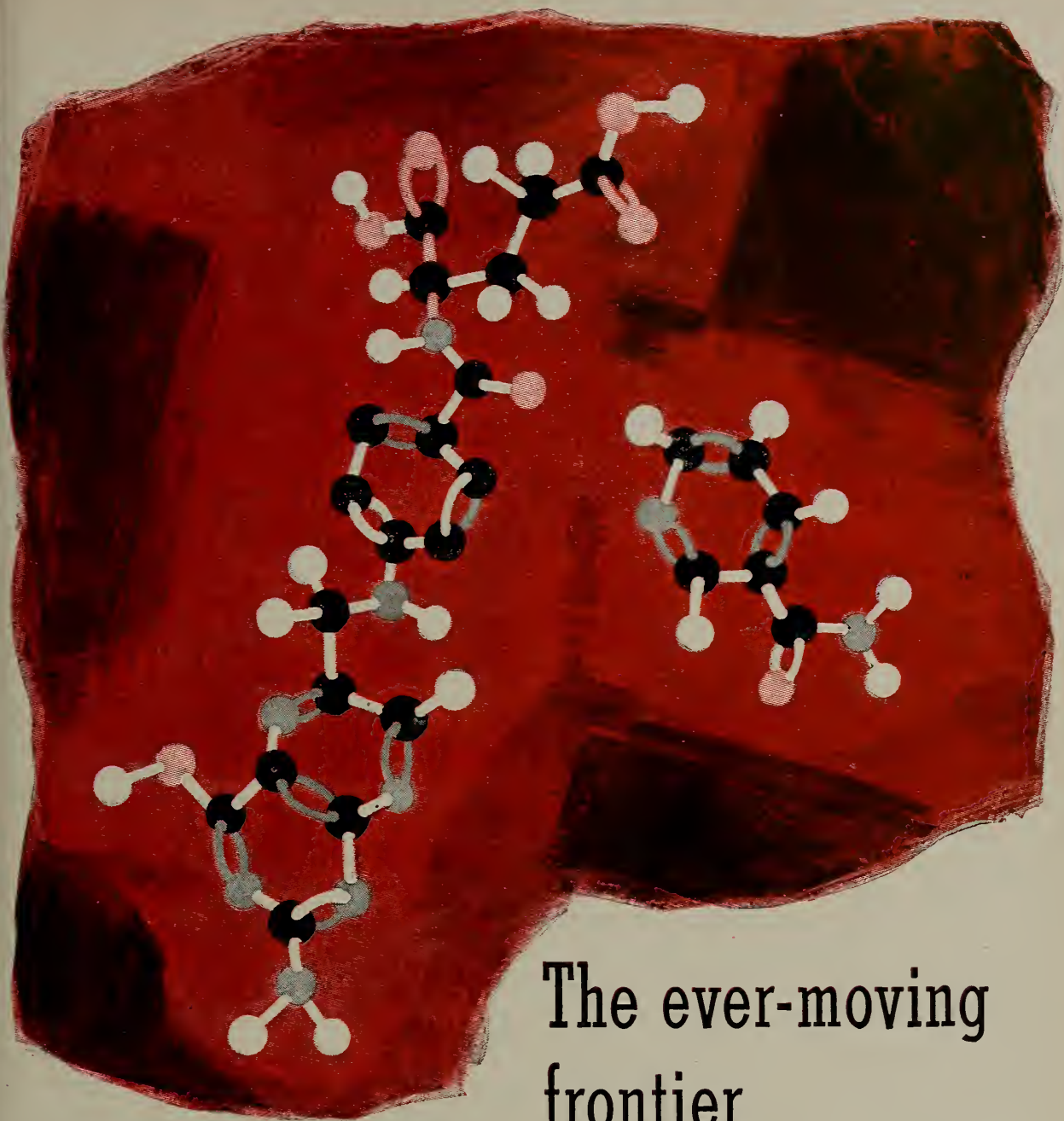
The Bureau of Investigation of the American Medical Association in Chicago, Illinois, also will examine any cancer cure that is submitted if accompanied by the following information.

1. Full information regarding the composition; if it is composed of more than one substance, the full name and amount of each substance;
2. The names and addresses of at least twenty-five persons who are alleged to have been cured by the use of the treatment;
3. The names and addresses of physicians who had the opportunity of diagnosing the condition in these twenty-five persons before they were treated.

At last report, no cancer remedy offered has been able to meet these simple conditions.

In spite of the fact that surgery, x-rays and radium are the only accepted methods for the treatment of cancer, notorious quacks apparently have little difficulty in obtaining distribution of their products through legally licensed medical practitioners and, when challenged, do not hesitate to point to these contacts as proof that their product has value else it would not have received this "recognition." No further comment is necessary except to call the attention of all reputable doctors of medicine to an enlightening report of the Council on Pharmacy and Chemistry of the American Medical Association published in the January 8, 1949, issue of *The Journal of the American Medical Association*, page 93, in which many frauds and nostrums and their methods of distribution and

(Continued on Page 548)



## The ever-moving frontier

Research on vitamin knowledge in the field of nutrition has come a long way since the early published researches of McCollum, Mendel and Funk. The science of nutrition is no longer the stepchild of medicine, nor the poor relation of agriculture. In particular, our understanding of the need for vitamins in human nutrition has enormously increased. Vitamins constitute in the aggregate the *sine qua non* for cellular respiration, reproduction, growth and repair.

For the past 25 years, biochemists have pressed forward a continually moving frontier of scientific discovery in the field of nutrition. In recent years, *Lederle* has been in the vanguard of this movement, its investigators being well known for their achievements with folic acid, pyridoxine, biotin, the pantothenates, liver extract, and allied substances. There will be no slackening in the efforts of this organization to uncover additional aids to better health and better living.

# LEDERLE LABORATORIES DIVISION

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MAY, 1949

Say you saw it in the *Journal of the Michigan State Medical Society*

537



# Socialized Medicine

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## GOVERNMENT BOOKKEEPING

Some of the world's weirdest bookkeeping is practiced by the United States Government, which causes the Hoover Committee an acute pain.

As an example, we cite the statement of Social Security Administrator Altmeyer, who declares that the Social Security fund is now about \$7,000,000-000 short.

But, says Altmeyer, there's nothing to worry about. The money isn't needed immediately. It simply represents funds marked for future obligations.

That blithe explanation reminds us of the defaulting bank cashier who snitches a few bucks to bet on the ponies, with the expectation of returning them when his horse comes in.

The trouble is, it very seldom ever does.

The money Altmeyer is talking about has been deducted from your weekly paycheck, plus contributions from your employer. It is supposed to represent insurance funds to give you a pension when you grow too old to work, or to help support your widow or children.

Ever since the Government started collecting Social Security funds, it has used the money to meet current operating obligations. IOUs have been put back in the Social Security till as acknowledgment of the debt.

But when it comes time to pay off those Social Security obligations, it will be necessary to make up the deficit from general funds. And the general fund, fellow sufferer, is accumulated from taxes levied on your incomes or other taxable sources.

The answer adds up much more simply than any ciphering the lads in Wishington are able to do. It just means that when the time comes for Uncle Sam to pay you your Social Security money, toward which you have already contributed, it will be necessary to tax you all over again.—Editorial, *Detroit Free Press*, March 28, 1949.

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## BRITON WARNS U. S. TO PASS UP STATE MEDICINE

### Tradition of Privacy Ruined

Cecil Palmer, British journalist and author, asserted in an interview that socialized medicine in Great Britain is not working well. Its costs, he said, are exceeding estimates by millions of dollars.

Palmer, who will make a sixteen-week lecture tour, said he intended to warn Americans to steer clear of state medical service. He said that many older doctors and specialists in Britain have retired rather than work under state direction.

"The remaining physicians find themselves swamped with work and burdened with the red tape of filling out forms for government records," Palmer said. "Moreover, socialization of medicine has ruined the relationship of privacy that has always existed between doctor and patient. Case histories of patients must be turned in to local boards with the result that in the smaller communities the nature of individuals' illness becomes public knowledge."

### Protest Lack of Privacy

Palmer said the Housewives league has protested the lack of privacy and that a group of prominent physicians and specialists has organized the Fellowship of Medicine to keep check on professional standards and to persuade the ministry of health to change the regulations so as to insure more privacy for patients.

Dentists have been swamped with work with thousands demanding dentures, Palmer said. So many sets of new false teeth were pawned that the market for used dentures became saturated and pawn shops now refuse to take them, he said.

### Doesn't "Square Up"

"We have had nearly four years of socialism in practice in Britain and it doesn't square up with theory," Palmer said. "It is worse than any one thought it was. Nationalization of industries and services has not done the things claimed for it. It has increased costs, reduced quantity and quality and added a burden to the taxpayers."

Palmer said he hoped the United States would not adopt a complacent attitude toward communism or attempt to compromise with it.

"I judge communism to be the greatest of all dangers to civilization," he said. "If you are complacent about the issue, as we have been in Britain, you will regret it. In Britain, communism is infinitely more powerful and potent than the government dares to admit."—*Chicago Tribune Press Service*, Feb. 20, 1949.

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## SOCIALIZED MEDICINE

Being an industrial-labor publication we are not particularly interested in the medical profession. We know many of them and like them, not only from a professional standpoint but also as people.

We are not exactly interested in how much money they make or, what they do with it after they make it. And it's a cinch that the internal revenue department will make it look sick when they have taken their bit—and, we could like the medics a lot more if they had a

(Continued on Page 540)



## MODERNIZE YOUR LABORATORY...

Make your laboratory as efficient as your examining room. Equip it with a modern Hamilton laboratory bench designed for compactness, yet with space and accommodations for everything you need. Save valuable time and precious energy by concentrating all your laboratory equipment and materials in this one convenient unit.

The working surface is dark gray unbreakable resisto  $13\frac{3}{8}$ "x65". It has seven large, wood-steel drawers ranging from  $3\frac{1}{8}$ " to  $7\frac{3}{4}$ " deep. The big cupboard provides ample storage space for bulky boxes and bottles. Chrome plated gas, air, electric and water services are located above the working surface. Above the cupboard unit is an acid resisting porcelain enameled sink. See this "One-Piece" laboratory at—Randolph's.

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# *Randolph Surgical*

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## SOCIALIZED MEDICINE

*(Continued from Page 538)*

cure for that dread disease, which grips the nation every March 15, known as income taxitis, and with which they themselves are infected. It doesn't matter much how large, or, small their income; they have the same economic problems that any business man has—and when Uncle Sam has taken his bite out of their income, they look pretty much like the rest of us.

In my book health is the most important thing on the face of this earth. Therefore, doctors are the most important branch of professional society. We look to them in sickness to restore us to health—and in health to eliminate the causes which may make us ill. They have almost entirely eliminated some of the dreaded epidemic diseases and are in constant research in the never ending fight to find better and cheaper methods of curing what, until now, have been incurable diseases. Indeed it is a noble profession.

No greater monument could be built than that a man would dedicate his life to the well being of humanity, and to the alleviation of human suffering.

Not so, however, with the professional politician. He surrounds himself with those of his kind. His is to perpetuate himself, and his supporters, in public office through use of the spoils system of government.

Now, being an industrial-labor publication, we are particularly interested in the working men, and women, of America and their problems. Also, we are interested in the employer, and his problems—in so far as labor relations are concerned.

We think that "compulsory health insurance" or, "Federal Public Health Insurance" as Truman, and Ewing, choose to call it, is still "socialized medicine" and that it is the first step toward socializing America.

According to Webster's dictionary—Socialism is defined thus: "An economic theory or system of the reconstruction of society on the basis of co-operation of labor and the community of property." And that is why we are decidedly against socialism—and you may call it by any name you wish.

All right buddy, haven't we seen enough of the screwy Socialistic system of Europe to know that we don't want it here in America. Haven't we just fought a war to knock out one system of Nazi-Socialism only to be faced with the same ordeal with Communist-Socialism . . . to say nothing of the billions of dollars we have had to give England to finance her Socialistic experiment. What greater evidence could one possibly want as proof of what is happening here in America. Perpetuation of office, Socialism and dictatorship, brought about by subterfuge—false promises—and misrepresentation.

Of course, we subscribe to the ideals of better medical care. And it is coming. Every effort is being made to provide medical care to those who require it—and in the democratic, American way—by making it possible for the average American to have health and hospital care through the co-operation of the medical societies and other independent agencies. That's the democratic way. Let us who are interested find the way—in the "American tradition."—*The Mediator*, April-May, 1949.

## WHAT THEY VOTED FOR

Senator Wherry, speaking in New York the other day, denied that voters in the last election gave any mandates for the schemes the Truman administration is pushing.

"How many thought they were voting for compulsory health insurance?" Mr. Wherry asked. "How many thought they were voting to socialize the steel industry? And just how many farmers thought they were voting for repeal of the Taft-Hartley act?"

Mr. Truman didn't come out in so many words for government steel mills during his campaign, but the New Dealers have been yammering ever since the war that the steel companies should expand production, and their candidate gave implied support, at least, in his diatribes against "gluttons of privilege." As for health insurance and Taft-Hartley repeal, Mr. Truman said plainly that he was for both.

The senator is right, nevertheless, in asserting that the people who voted for Mr. Truman didn't vote for these measures. Farmers assuredly didn't vote for Taft-Hartley repeal. They voted for Mr. Truman's promise to repeal the laws of supply and demand and keep on paying them high prices for their products, out of the treasury if necessary. Labor union members assuredly didn't vote for the high living costs that the farm program entails, but they did vote against the Taft-Hartley act.

Tenants voted for Mr. Truman's promise to continue the confiscation of landlords' property for tenants' use. Negroes voted for the civil rights program, concerning which Mr. Truman was quoted soon after the election by a fellow Democrat, Representative Boykin of Alabama, as saying that he didn't believe in it any more than Mr. Boykin did, but needed it to win votes.

All these mainly selfish pressure groups still wouldn't have been enough to elect Mr. Truman if about four million Republicans hadn't looked over little "Me-Too" from Albany and decided that he didn't offer a sufficient change from Mr. Truman to make it worthwhile for them to go to the polls.

Probably not one in ten of Mr. Truman's supporters was for his whole program. The rest were for that part of it that promised them something for nothing. They are now discovering that if they are to be paid off, a lot of other groups will also have to be paid off, at their expense.—Editorial, *Chicago Tribune*, January 23, 1949.

\* \* \*

## EXCERPTS FROM JOHN S. KNIGHT EDITORIALS

The British experiment in Socialism is still an experiment. It has been made possible by the money so generously supplied by the United States through the original British loan and the billions being provided under the European Recovery Program.

Capitalism in Great Britain is virtually extinct. Accumulated wealth is lying idle because there is no incentive to put it to work. Such industry as is still untouched by nationalization clings to the non-competitive cartel system which results in restricted production and high prices.

*(Continued on Page 542)*

# Judicious Laxation



## through ease of administration

Of the many features which have won for Phospho-Soda (Fleet)\* an impressive record of clinical acceptance, outstanding is its ease of administration. This, together with its controlled action, and its freedom from undesirable side effects, gives assurance that every prescription of Phospho-Soda (Fleet) will result in thoroughly effective — yet gentle — catharsis.



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### PHOSPHO-SODA (FLEET)

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✓	Prompt action	✓	Absence of Constipation Rebound	✓	Flexible Dosage	✓
✓	Thorough action	✓	No Development of Tolerance	✓	Uniform Potency	✓
✓	Gentle action	✓	Safe from Excessive Dehydration	✓	Pleasant Taste	✓
✓	Free from Mucosal Irritation	✓	Nonhabituating	✓	Free from Cumulative Effects	✓

Phospho-Soda (Fleet) is a solution containing in each 100 cc. sodium biphosphate 48 Gm. and sodium phosphate 18 Gm.

ACCEPTED FOR ADVERTISING BY THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION



EXCERPTS FROM JOHN S. KNIGHT  
EDITORIALS

(Continued from Page 540)

The standards of living, except for the very poor, are the lowest since the turn of the century. The once proud British Empire has been reduced to a minor power and the United Kingdom is stagnating under a system in which individual incentive and private enterprise are as dead as the proverbial duck.

\* \* \*

What puzzles me is that so many Americans who enjoy the highest living standards in the world are apparently convinced that our hope for future progress lies in the importation of European social and economic philosophies which are failing dismally in the countries where they have been put to the test.

The despised capitalist system is feeding, clothing and arming Europe. Without our help, the Western nations of that continent would fare very badly indeed.

\* \* \*

. . . If Congress acts favorably on expanded Social Security, compulsory health insurance, and Federal aid to education, workers getting \$3,000 will be paying \$120 a year as their contribution to the welfare state. . . . The cost to a 1,000-man employer will range between \$120,000 and \$160,000 a year.

\* \* \*

The new Senator from Maine, Margaret Chase Smith, gave the correct appraisal: "I voted for Senator Taft because I felt the other side offered only negative proposals."

\* \* \*

## HEALTH INSURANCE CATALOGUE

Sixty-six years ago, Prince Otto von Bismarck's Germany set up the first national "Sickness Insurance" plan, covering industrial workers. Kaiser Wilhelm I had proclaimed: "The cure of social ills must be sought not exclusively in the repression of Social Democratic excesses, but simultaneously in the positive advancement of the welfare of the working classes." This state assumption of responsibility has been interpreted by some as farsighted statesmanship, by others as the embryo of the totalitarian state. In any case, it caught on. Today more than forty nations have some form of public health insurance. In the catalogue:

*Germany*, since Bismarck's day, 1883, through Hitler's regime, and under Allied Occupation, has steadily developed sickness insurance. About 42 million, or 70 per cent of the population, are covered. Premiums are raised through a 6 per cent payroll tax, shared equally by employes and employers.

*Austria*, since 1888, has copied the German pattern. More than 6,500,000, or 90 per cent of the population, are now health-insured. White-collar workers contribute 4.2 per cent, and manual laborers 5 to 6.5 per cent of their wages. Administration is in the hands of semi-private companies supervised by the government.

*Sweden*, since 1891, has promoted voluntary sickness and accident insurance. More than half the population, or 4,700,000, are covered. They pay varying premiums to government-approved societies. The government pays

55 per cent of the societies' outlay. Nearly all of Sweden's 3,359 doctors take part. A law already passed, but not effective until 1951, will make health insurance compulsory.

*Norway* has had health insurance since 1909, compulsory for all earning less than 9,000 kroner (\$1,800) yearly and voluntary for those earning more. About 2,500,000, or 80 per cent of the population, are covered. Most of the country's 2,800 doctors are in the plan. A bit more than half the premiums is paid by employes, the remainder by employers and government.

*Denmark*, beginning with health co-operatives in 1891, has had a compulsory system since 1933. Of Denmark's 4,000,000 people, all those over 15 years of age must now register with recognized health insurance co-operatives and contribute premiums equaling up to \$10 yearly. But benefits depend on individual income. Those who have more than \$1,700 a year after taxes are not eligible for free medical treatment.

*France* has had compulsory health insurance since 1928. It now covers 30 million, or 75 per cent of the population, including the republic's President but not its lawyers, doctors and landowning farmers. Regional councils, elected by premium-paying workers and employers, manage the program. Funds are derived from a 12 per cent social security levy on payrolls, half contributed by employes and half by employers. Patients may choose any doctor. Doctors merely sign forms with which patients claim reimbursements from their insurance. By now an ingrained habit, the principle of health insurance is beyond political argument.

*Italy* has kept the national health insurance introduced by Mussolini in the '20s. Almost 15 million of a working population of 25 million participate. Premiums, contributed equally by employers and employes, amount to 3 per cent of white collar, and 5 per cent of manual worker salaries. The insurance organization has a salaried staff of 600 doctors who serve members, but the main medical burden is borne by 15,000 of the country's independent practitioners. Their bills are paid half by the insurance, half by the insured.

*Australia's* Federal Parliament last year enacted a compulsory program of free drugs, in which the government would pay pharmacists for all prescriptions. But doctors have refused to co-operate, i.e., write prescriptions on government forms; they say free medicine has led to "tonic swilling" in nearby New Zealand. Parliament is also weighing compulsory health insurance that would pay half of every citizen's doctor bills from the public treasury. Doctors don't like this scheme either; they argue it will bring "a third party into the traditional, intimate and confidential relationship between doctor and patient."

*New Zealand* has had compulsory insurance since 1938. Costs come from a general social security levy of 7.5 per cent on all incomes. Nearly 2,000,000 New Zealanders are entitled to free medical care except for specialist services. Most telling criticism has been that doctors are doing so well financially that they neglect research and spurn lower-paying hospital posts.

(Continued on Page 544)



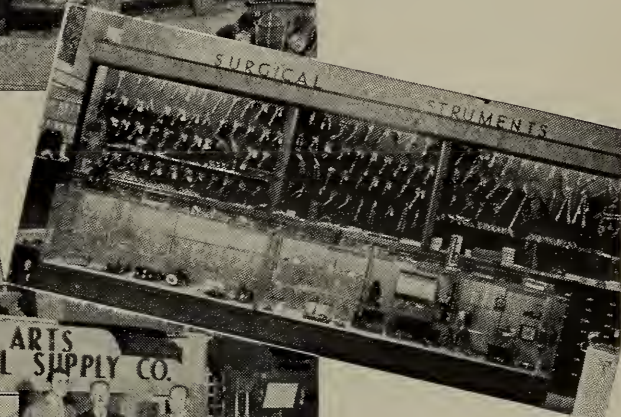
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## HEALTH INSURANCE CATALOG

(Continued from Page 542)

Russia, the ultimate in state control, has the ultimate in state health insurance. Medical service is free to all. Doctors and dentists are assigned and paid by the state. Benefits, however, are limited by facilities available. Relative example: Russia has one dentist for 14,000 people; Britain has one dentist for 3,271 people, the U. S. one for 1,885 people.—*Time*, March 21, 1949.

\* \* \*

### SENATORS OFFER OWN HEALTH PLAN

Five senators today offered a new "voluntary health insurance bill" intended to make hospital and medical care available to all persons.

Senator Hill (D., Ala.), one of the sponsors, said the new plan, based on state and local controls, is a substitute for what he called "compulsory system" advocated by President Truman and some members of Congress.

The bill calls for the use of federal funds "to assist the states to survey, co-ordinate, supplement and strengthen their existing health resources."

#### Patterned on Present Law

Besides Hill, the measure is backed by Senators O'Connor (D., Md.), Withers (D., Ky.), Aiken (R., Vt.), and Morse (R., Ore.).

The Alabama senator said the bill is patterned on the present federal law for assisting states and regions in building hospitals. That act was sponsored in 1944 by Hill and Associate Justice Burton of the supreme court, then a Republican senator from Ohio.

Hill said states and communities now are building 700 hospitals under that plan and the voluntary health insurance bill "will perform the same service for financing hospital and medical care."

#### Too Valuable to Drop

"We believe that the present system of medical care has been too valuable, too effective and too useful through the years, to throw it aside for a new system which might not work," Hill told a reporter, adding:

"A compulsory system of health insurance carries with it the danger of uprooting and destroying the entire system of medical practice in this country."

The new bill, Hill said, would be aimed at stimulating present systems of insured or pre-paid medical care. The federal government would help states pay costs where individuals were unable to do so.

Three sources helped draw up the new plan, Hill said: Dr. Gilson Colby Engel, president of the Pennsylvania State Medical society; Dr. Paul Magnuson, chief medical director of the Veterans Administration and the American Hospital association.

#### Persons Unable to Pay

This is what the bill provides:

1. Persons unable to pay would get medical and hospital care through government-supported membership in non-profit, prepaid health insurance programs.

"2. Such persons would be issued service cards entitling

them to the same type and quality of hospital and medical services provided regular subscribers to health insurance plans. They would not be identified as recipients of government assistance.

"3. The state health insurance agency would reimburse the health insurance plan for the full cost of hospital and medical care provided under the plan, plus a reasonable administrative expense. The state may collect partial payment based on ability to pay from persons unable to pay full subscription charges.

#### Unemployed Benefits

"4. When any person enrolled in a prepayment plan becomes unemployed, his health insurance subscription charges would be paid by the state agency for the same period that unemployment compensation is paid.

"5. Prepaid health insurance coverage would be broadened by providing for payroll deduction of subscription charges for employees of federal, state and local governments who request it.

"6. Diagnostic centers, clinics and other facilities in the states would be surveyed and a plan developed for providing additional needed diagnostic services.

"7. Facilities and services for treatment of mental, tuberculous and chronic diseases would be surveyed and a plan developed for strengthening and improving the financing of such services where needed.

#### Bolster Rural Areas

"8. Areas lacking adequate medical care would be surveyed and plans developed to encourage physicians to practice in these communities. This need is greatest in rural areas.

"9. Existing enrollment in voluntary prepayment plans would be surveyed and methods developed for encouraging enrollment of all persons able to pay subscription charges, particularly in rural areas."—Associated Press Release, March 30, 1949.

### PROGRAM FROM THE DOCTORS

Men and women in the medical field in this state, through announcement of the president of the Florida Medical Association, are being urged to become "salesmen" of voluntary hospital insurance as opposed to any compulsory health coverage offered by the Federal Government.

We welcome the statement. It shows that the leaders of the organization, long content with mere negative opposition to governmental health activity, have seen the need for an affirmative approach to the problem.

It is good, too, to find the FMA putting emphasis on voluntary and co-operative efforts of various kinds. The presumption is always—or should be—that compulsion is to be avoided where possible. Not as a plague, because it is a necessary aspect of government, but as a last resort to be used only if voluntary methods have proved themselves grossly unable to perform a needed service.

But the fact remains that the FMA program so far goes only a small part of the way toward providing the kind of voluntary medical insurance that a large proportion

(Continued on Page 548)



# "Salt-Free" Cottage Cheese

An attractive fortification for restricted diets is this salt-free dairy product. Additional qualities that will recommend it to your dietary notice: It is fat-free ( $\frac{1}{4}$  of 1% or less) ... it is very high in complete proteins ... it is low in total calories ... and it is high in calcium and phosphorous.

Borden's salt-free cottage cheese is carefully made from pasteurized fresh dairy products. Your patient may add non-restricted food items to this cottage cheese to form many different dishes that are both appetizing and nutritious. Order Borden's salt-free cottage cheese from any Borden milkman.

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# Michigan Medical Service

## MICHIGAN MEDICAL SERVICE— MICHIGAN'S BLUE SHIELD

With March, 1949, marking the centennial of the Wayne County Medical Society, there is probably no organization from whom congratulatory messages were of more significance than the good wishes of the Michigan Medical Service. March was also the anniversary month of this organization, which is the doctors' own non-profit, voluntary program of surgical-medical care in Michigan, and the Wayne County Medical Society was a determining factor in the establishment of the program.

Now recognized throughout the world as one of the nation's leading Blue Shield Plans, Michigan Medical Service began only nine years ago, in March, 1940. For approximately ten years prior to its establishment, members of the Michigan State Medical Society, the Wayne County Medical Society and other county medical societies in the state had made an intensive study of prepayment, medical care plans. The studies included an examination of the British Panel System by representatives sent to England for that purpose. After the investigations and studies had been completed, it was necessary to secure enabling legislation. This legislation was passed during 1939 and Michigan Medical Service began operation on March 1, 1940.

Since then—from March, 1940, to January 1, 1949—Michigan Medical Service has paid \$33,426,011.21 for services to the public rendered by the doctors. Of this amount, \$7,125,912.24 was paid in 1948 alone. From inception to January 1, 1949, 576,574 surgical cases (excluding those under the Veterans program) were handled by Michigan Medical Service. In 1948 these cases totaled 106,384.

The year of 1948 marked the enrollment of the millionth subscriber to Michigan Medical Service, and at the year's end, the organization had a total of 1,311,811 persons enrolled in its plan.

Although one of the Blue Shield Plans of the nation, Michigan Medical Service, for practical purposes, is known as one of Michigan's Blue Cross Plans. Its companion organization for hospital care is Michigan Hospital Service, a Blue Cross Plan, which also celebrates a March anniversary.

Organized ten years ago, Michigan Hospital Service enrolled its first subscriber on March 17, 1939, and on January 1, 1949, had an enrollment of 1,537,632 members.

During its ten-year period from March, 1939, to January 1, 1949, Michigan Hospital Service paid \$62,486,685.85 to hospitals for services rendered Blue Cross subscribers. Of this amount, \$14,842,453.83 was paid in 1948 alone.

From inception to January 1, 1949, 7,997,741 days of hospital care were provided by Michigan Hospital Service. In 1948 alone, these days of care reached the total of 1,189,561.

## NEW CERTIFICATES—Revised March 1, 1949

New certificates were revised as of March 1, 1949, as follows:

GS-3-49—Surgical Benefit Certificate

GMS-3-49—Medical-Surgical Benefit Certificate

GES-3-49—Community Enrollment Surgical Benefit Certificate (with Maternity Service)

These new certificates, which replace all previous certificates, are now being distributed to all new and old subscribers. However, the changes in benefits will not be effective until JUNE 1, 1949.

The main purposes for issuing the revised certificates are:

1. To combine five certificates into the three listed above.
2. To clarify certain provisions of the previous certificates.
3. To provide for certain new benefits and exclusions authorized by the Board of Directors.

The sections of the new certificates that have significant changes are as follows:

### "In Patient Services"

(2-a) All Surgical and (2-b) Maternity Services are provided only when patient is *a bed patient in a regularly accredited hospital*. Rider attached to certificates does provide for office surgery and out-patient hospital surgery, when the *procedure* is listed in the "Schedule of Benefits" at \$20.00 or more. A series of procedures performed at the time or on different days whether of like nature or not, *are not covered*.

Example: Warts, moles, sebaceous cysts, corns, ingrown toenails, eardrum puncture, pleural paracentesis, circumcisions, surgical removal of impacted teeth or for the removal of excess gum tissue *are not covered*.

(2-b) Maternity Services; i.e., *services for any condition due to pregnancy, except ectopic pregnancy*, but not

(Continued on Page 548)

# THIS SUGGESTION MAY BE OF VALUE FOR YOUR THROAT PATIENTS:

When cigarette smoking is a factor in throat irritation,  
many leading nose and throat specialists suggest\*  
to their patients a choice of 3 alternatives:

1. Stop Smoking,
2. Smoke less,
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- Philip Morris is the *only* cigarette proved definitely and measurably less irritating!\*\* Perhaps you too will find it worth while to suggest "Change to PHILIP MORRIS." . . . by far the wisest choice for everyone who smokes.



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\*Completely documented evidence on file.

\*\*May we send you copies of these published studies:

*Laryngoscope*, Feb. 1935, Vol. XLV, No. 2, 149-154; *Laryngoscope*, Jan. 1937, Vol. XLVII, No. 1, 58-60; *Proc. Soc. Exp. Biol. and Med.*, 1934, 32-241; *N. Y. State Journ. Med.*, Vol. 35, 6-1-25, No. 11, 590-592.



## NEW CERTIFICATES

(Continued from Page 546)

until after the certificate has been in effect nine (9) consecutive months immediately preceding the date of delivery. Ectopic pregnancies will not be subject to the nine month waiting period.

Under these new certificates false labor, miscarriage, abortions, eclampsia etc. will be subject to the nine month waiting period. Under our former certificates, these "accidents" of pregnancy were covered, also the "Schedule of Benefits" and "Doctors' Service Reports" instructions indicate these conditions were a benefit.

It was necessary for us to make this change due to ruling of the Commissioner of Insurance that all insurance companies and service plans abide by the same rules in regard to maternity. Hereafter, when an employer-group is cancelled, we will be paying maternity services (including false labor, miscarriages, abortions, eclampsia etc.) for nine months after the date the employer-group cancels. Actual childbirth will be covered if the certificate could have been in force nine consecutive months preceding date of delivery.

### "Out Patient Services"

3. Accidental injury services rendered within twenty-four (24) hours are a benefit. Previously, emergency first-aid cases (3-b) handled in the doctor's office were not eligible unless the service was rendered within eighteen (18) hours.

3(b) Emergency first aid in the doctor's office for which the maximum fee shall not exceed Fifteen (\$15.00) Dollars was a liberalization. This is now part of the contract.

### "Supplemental Services—X-Ray Services"

4(a) X-Ray services classified as screening, miniature plates and stereos are not a benefit.

4(b) Anesthesia must be rendered by a doctor not in charge of the case and *not a salaried employe of the hospital.*

### "General Limitations"

The following are additional exclusions:

- 5(b) Radium and indirect blood transfusions.
- (f) Sterilization of either sex, regardless of medical necessity.
- (g) X-Rays classified as screening, miniature plates or stereos.

### "Exception to Full Service"

7(c) This section provides that the doctor rendering service may make an additional charge in those cases where the subscriber does collect from third party accident cases. In this case, the payment by Michigan Medical Service shall be considered as a payment on account of the reasonable value of the services, and the difference between such reasonable value and the amount received by the doctor from Michigan Medical

Service shall be the liability of the subscriber to the doctor, payable out of such damages or reimbursement if, as and when recovered by the subscriber.

The foregoing outlines the changes that affect the Doctor-Patient relationship. Other changes have been made in the certificates in the interest of clarification and some rules and regulations that affect Michigan Medical Service-Subscriber relationship only.

## CANCER NOSTRUMS AND QUACKERY

(Continued from Page 536)

use are described. The conclusion of that report states:

"The Council recognizes the need for caution in the premature adoption of new theories or use of improved treatments for cancer and issues this report in condemnation of the numerous fraudulent remedies for the disease and the early publicity of unestablished remedies. When truly improved remedies for the treatment of cancer are found, it seems self-evident that these will quickly find wide application to all victims of cancer without the advertising used to promote the sale of cancer nostrums."

## PROGRAM FROM THE DOCTORS

(Continued from Page 544)

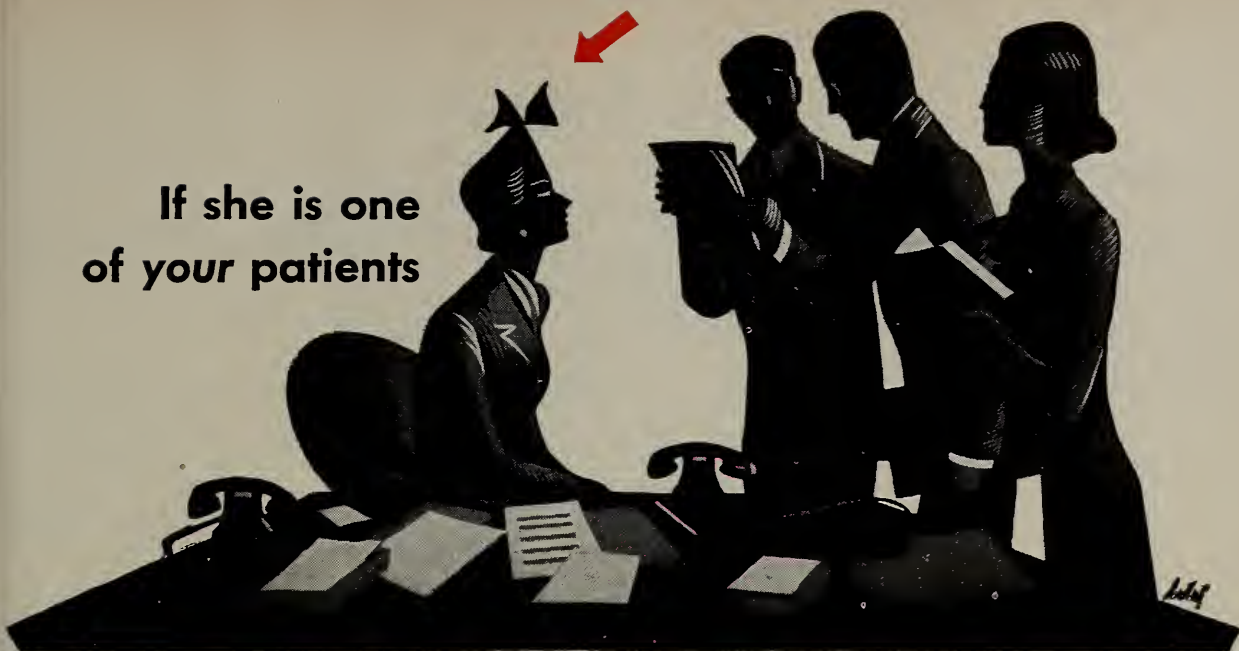
of middle-income citizens—those who expect to pay their way but are in no financial condition to manage excessive peaks of medical cost—so ardently want.

It is helpful to have insurance policies which cover hospital charges. It is better to push sales of policies which would also cover full medical and surgical care while in the hospital. But the ideal setup is a form of voluntary prepaid insurance which will be fully inclusive and not cover hospital expenses only.

To be sure, there is not a great deal of experience to go by in this all-inclusive voluntary plan. Those setting up such a system must feel their way carefully, balancing the extent of coverage which the public would like against the understandable reluctance of doctors to sign up under a system that might penalize them.

The point to be emphasized, however, is that the FMA is moving in behind a program that, in its present limited way, looks good. If the doctors realize that a voluntary system cannot prevail unless they volunteer, and if they push ahead as fast as possible toward a more inclusive voluntary plan, we are confident more Floridians will prefer their program to any compulsory government program coming out of Washington.—*Tampa Morning Tribune*, March 16, 1949.

If she is one  
of your patients



...Your help now may spell the difference between unprovided-for old age and economic security.

Women in business who are nervous, emotionally unstable and generally distressed by symptoms of the climacteric almost inevitably experience a reduction in efficiency as well as earning power.

"Premarin" offers a solution. Many thousand physicians prescribe this naturally-occurring, oral estrogen because...

1. Prompt symptomatic improvement usually follows therapy.
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4. This "Plus" (the sense of well-being enjoyed by the patient) is conducive to a highly satisfactory patient-doctor relationship.
5. Four potencies provide flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg. and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).



While sodium estrone sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol; equilin, equilenin, hippulin...are probably also present in varying amounts as water-soluble conjugates.

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# PR In Practice

## Socialized Medicine Materials Available From MSMS†

The materials listed here are available in reasonable quantities upon requisition to the MSMS Public Relations Office, 2114 Olds Tower, Lansing 8, Michigan.

- No. 1—*Analysis of the Ewing Report*—by J. S. DeTar, M.D., Milan, Michigan.
- No. 2—*Uncle Sam, M.D.*—published by the Michigan Public Expenditures Survey and shows Socialized Medicine as an economic threat.
- No. 4—*Brookings Institute Report Conclusions*—reprinted by National Physicians Committee (The conclusions of an unbiased survey).
- No. 5—*Doctor, My Statistics Feel Funny*—by Maurice Friedman, M.D., reprinted from the *Nation's Business* (Analysis of draft rejection figures).
- No. 6—*Socialism—A Politician's Paradise*—transcript of radio talk by Henry J. Taylor.
- No. 7—*A Step in the Wrong Direction*—by Dorothy Thompson (First-hand experiences in England).
- No. 9—*American Health Planning Avoids Compulsion*—talk by C. E. Umphrey, M.D.
- No. 10—*The Issue of Compulsory Health Insurance*—talk by A. E. Schiller, M.D.
- No. 11—*Michigan's Progressive Voluntary Health Program*—talk by H. W. Brenneman.
- No. 12—*Porter on Health Insurance*—Reprint from *Cleveland Plain Dealer*. "Health Insurance is a fine thing—and will remain so until the government gets hold of it."
- No. 15—*The Dr. Harris Letter*—Dr. Harris, prominent British surgeon writes his views on British medicine to a friend in Crawfordsville, Ind.
- No. 16—*The 12 Points of the AMA*.
- No. 17—*Government Medicine in New Zealand*—by A. Lexington Jones, D.D.S., M.S. of New Zealand. (Its social, economic, and political implications).

## Special Publications

- A—**SPEECH**—prepared by Whitaker and Baxter as a sample speech for use by members of Speakers Bureaus.
- B—**SAMPLE LETTERS**—A set of ninety-three letters which can serve as samples for writing to Congressmen. (LIMITED to ONE SET per doctor).
- C—**RESOLUTIONS**—A set of nine suggested resolutions for use by organizations that wish to express themselves on the subject of Socialized Medicine. (Available to CAP Committees).

It will be noted that some publications have been eliminated from the original list and some

new ones have been added. However, the same numbers are being kept to avoid confusion in ordering.

## From the Mailbag

The proof of a job well done lies in those letters of congratulation and praise occasionally received from others in the same field of endeavor. At the risk of "breaking an arm," a few excerpts from letters received at the MSMS Office are printed herewith:

*From C. H. Henry, M.D., Little Rock, Arkansas:* . . . we, in Arkansas, have been very busy and we hope that we shall do a job that will be a credit to all of us. We owe much to your C.A.P. for an outline to follow. Our plan is unpretentious but is definitely grass-roots.

\* \* \*

*From Evan A. Edwards, Field Secretary, Colorado State Medical Society:* It was very nice of the Michigan group to take the time and interest in Chicago to pass on to us your very splendid program. I feel the session was most productive, and we are going to use some of your ideas.

\* \* \*

*Harold I. Cohen, M.D., Lynn, Massachusetts:* . . . I have been informed that your organization is to be commended for being so far in advance in this problem (Socialized Medicine).

\* \* \*

*Dwight Anderson, Executive Secretary, Medical Society of New York State:* Congratulations on the splendid job Michigan is doing in channeling the AMA educational program through the home districts of legislators. . . . The analysis and summary of the Ewing Report by Dr. DeTar is especially informative and useful.

*Ernest R. Gibson, Executive Secretary, Florida Academy of Public Medicine:* We now have our state educational campaign under way and are following your Michigan CAP plan with certain modifications. We have found it very helpful.

\* \* \*

*Colorado State Medical Society:* . . . You will be interested to know that Dr. DeTar's Analysis made a ten-strike with Lawrence Martin of the Denver Post who is doing a series on compulsory health insurance. Martin thinks it is one of the best things he has ever read and we think he is right.

\* \* \*

*Charles Lively, Executive Secretary, West Virginia State Medical Association:* The pamphlet, "Co-operation with the American People," is one of the finest things I have ever read concerning public relations. I would like

(Continued on Page 584)

†Revised March 31, 1949.



## WHY A FIBRIN

## HYDROLYSATE ?

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1. Christensen, H. N., Lynch, E. L., Decker, D. G., and Powers, J. H. (1947), The Conjugated, Non-Protein, Amino Acids of Plasma.  
 IV. A Difference in the Utilization of the Peptides of Hydrolysates of Fibrin and Casein, J. Clin. Invest., 26:849, September.



# What They Thought of the 1949 Michigan Postgraduate Clinical Institute

*Conrad G. Collins, M.D.*, New Orleans (Guest Essayist): "We were honored to be selected as one of the guest speakers at the Michigan Postgraduate Clinical Institute and I enjoyed the scientific session and hospitality to the utmost. My 'ubiquitous host' Dr. Leonard Heath, was a very charming and efficient and generous host."

\* \* \*

*F. C. Grant, M.D.*, Philadelphia (Guest Essayist): "I appreciated very much being asked to talk to the Michigan Postgraduate Clinical Institute and enjoyed the meeting."

\* \* \*

*Howard K. Gray, M.D.*, Rochester, Minnesota (Guest Essayist): "May I tell you how deeply I appreciated the privilege of being on the Program of the Michigan Postgraduate Clinical Institute and the opportunity of meeting with the members and the speakers. It was a delightful occasion for me and I thank you very much."

\* \* \*

*Harry S. N. Greene, M.D.*, New Haven, Connecticut (Guest Essayist): "I enjoyed meeting the group and am obliged to you for the opportunity of participating in the Institute."

\* \* \*

*C. Rollins Hanlon, M.D.*, Baltimore (Guest Essayist on the Heart and Rheumatic Fever Day): "I enjoyed myself greatly and it was good to get an opportunity to talk with you and the many other Michigan men whom I had the pleasure of meeting. I enjoyed appearing on the program and I hope that I may see you all again in the future."

\* \* \*

*Tinsley R. Harrison, M.D.*, Dallas, Texas (Guest Essayist on the Heart and Rheumatic Fever Day): "It was a pleasure to be with your group on your 1949 Heart and Rheumatic Fever Day."

\* \* \*

*F. W. Konzelmann, M.D.*, Atlantic City, N. J. (Guest Essayist): "I wish to thank you for the very very cordial and very enthusiastic reception I received as a guest speaker on the 1949 Michigan Postgraduate Program. I thoroughly enjoyed my visit to Detroit, and was almost overwhelmed by your hospitality. I hope that my contribution added a little bit to the knowledge of those who were present at the time of my presentation."

\* \* \*

*Frank H. Krusen, M.D.*, Rochester, Minnesota (Guest Essayist): "As previously, I greatly enjoyed participating in the meeting of the Michigan Postgraduate Clinical Institute."

\* \* \*

*Chauncey C. Maher, M.D.*, Chicago (Guest Essayist): "I was very happy to participate in the Program of the Michigan Postgraduate Clinical Institute and I enjoyed

your luncheon, your hospitality, and some of the papers that I had the privilege of listening to. I was much impressed with the success of the meeting."

\* \* \*

*D. W. Gordon Murray, M.D.*, Toronto, (Guest Essayist): "I enjoyed my visit in Detroit and was very pleased to meet all of you there."

\* \* \*

*Howard F. Root, M.D.*, Brooklyn, N. Y. (Guest Essayist): "I enjoyed very much my stay in Detroit and the opportunity to participate in your Michigan Postgraduate Clinical Institute. May I congratulate you upon the large attendance and particularly the appreciative attention of the audience. When my turn came late Friday afternoon, I was surprised to find so large an audience after the intermission and particularly to have the questions from the doctors present there who asked me afterwards about the problems of certain patients exemplified in my talk."

\* \* \*

*Sidney Rothbard, M.D.*, New York (Guest Essayist on Heart and Rheumatic Fever Day): "I want to assure you that I had an enjoyable trip and am happy that the presentation was well received."

\* \* \*

*Arthur A. Schaefer, M.D.*, Milwaukee (Guest Essayist): "I enjoyed participating in your program at the Michigan Postgraduate Clinical Institute, and was very interested in the rest of the program. Both Mrs. Schaefer and I enjoyed the hospitality of your group."

\* \* \*

*L. Howard Schriver, M.D.*, Cincinnati, Ohio (Guest Essayist): "May I send my kindest personal regards to all who were so hospitable to me on my recent trip to address the Michigan Postgraduate Clinical Institute. I appreciated it very much."

\* \* \*

*Charles S. Stevenson, M.D.*, Detroit (Guest Essayist): "I was very glad to give a talk before the Postgraduate Clinical Institute and also that I will be very happy to comply should you wish again to avail yourself of my services. I think that the importance of such an institute is practically immeasurable and it is the sort of thing that I am anxious to support in any way I possibly can."

\* \* \*

*Leo M. Taran, M.D.*, New York (Guest Essayist on Heart and Rheumatic Fever Day): "I wish to express to you my sincere thanks for the interesting and instructive meeting that I have had in Detroit on Saturday morning, March 26. It is hardly necessary for me to say that I am very appreciative of the hospitality that your committee extended to me."

(Continued on Page 624)

# The JOURNAL

*of the Michigan State Medical Society*

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## Diphtheria in the City of Detroit

By Joseph G. Molner, M.D., M.P.H.,  
Bruce H. Douglas, M.D., and  
Herbert A. Raskin, M.S.P.H.  
Detroit, Michigan



J. G. MOLNER, M.D.



H. A. RASKIN, M.D.

WITHIN RECENT YEARS, progressive health education has alerted the public to such little-understood diseases as poliomyelitis, rheumatic fever and cancer. In contrast to these unknowns of medicine, the knowledge of diphtheria is most satisfactory in that the causative agent of the disease and its mode of transmission are known, there exist specific preventive measures, a reasonably good gauge of susceptibility and an effective curative agent. In diphtheria toxoid, the health officer possesses the means of preventing, controlling and perhaps even eradicating diphtheria from the realm of health hazards; in diphtheria antitoxin, the clinician possesses a potent therapeutic agent.

Nevertheless, in spite of this, there has insidiously developed an apathy and laxity toward diphtheria. With the decreasing incidence, physicians today are

seeing fewer cases, with the result that familiarity with the disease as a diagnostic entity and a public health menace is accordingly decreasing. Comparably, the general public, hearing less about diphtheria, has come to regard it as a problem of the past and the attitude toward artificial immunization has become very lax. Likewise, because of parental indifference, timely diagnosis has also suffered. That diphtheria is a "disappearing disease," and that it is not to be regarded seriously, is an attitude that must be vigorously repudiated.

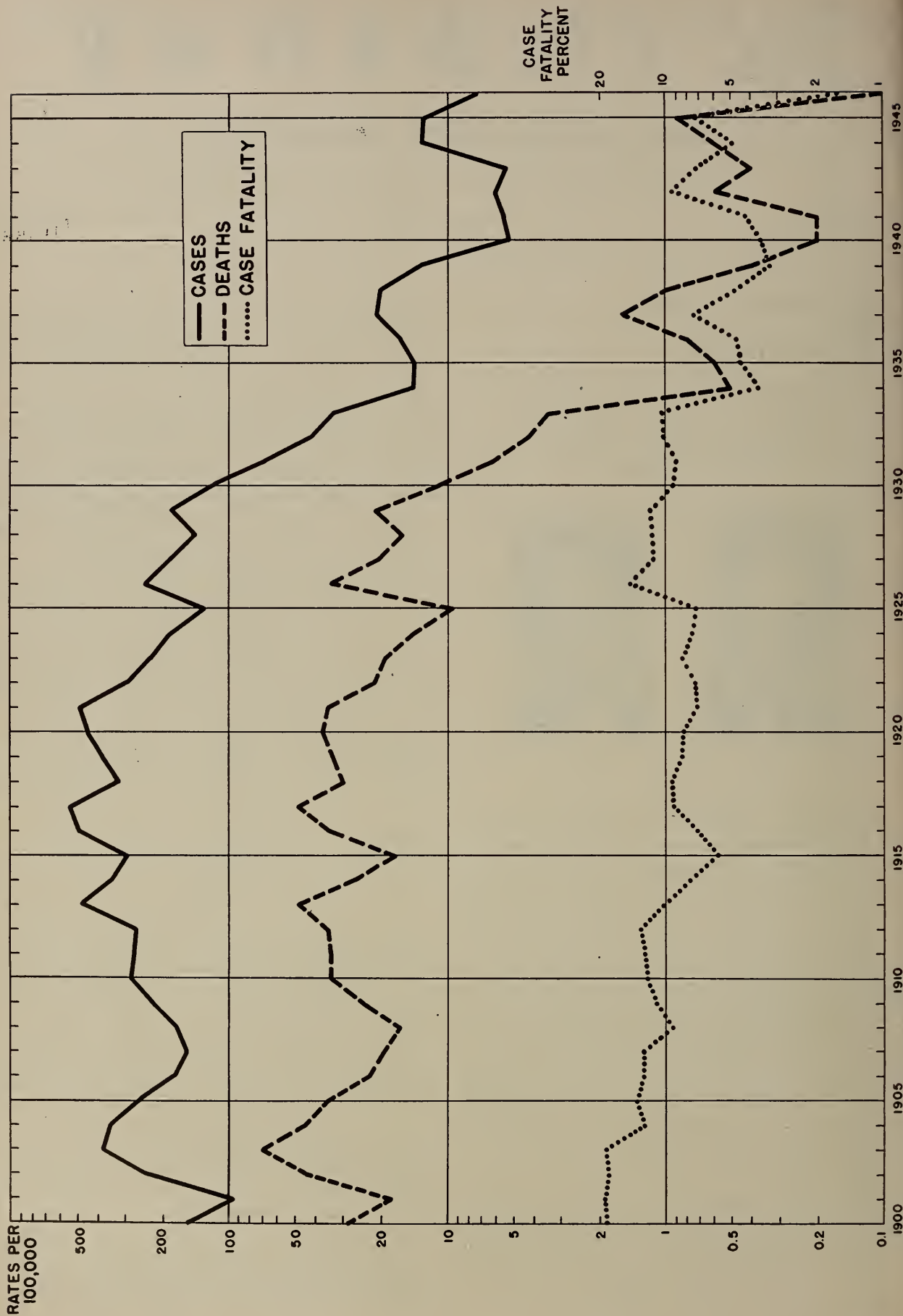
The danger of such an attitude was recently revealed by the epidemic proportions of diphtheria in many regions of the world, especially in northwestern areas of Europe. It was a rude reawakening of interest in this preventable disease by both the medical profession and the laity. The threat of the introduction of more virulent strains of this organism into the United States by returning personnel of the armed forces from these areas produced a sudden surge of frightening predictions in editorial and report form. There was great concern and alarm as reports of rising incidence occurred even in this country.

Fortunately, these forecasts did not materialize. Postwar statistics indicate that the rise in incidence of diphtheria was of a transient nature, and should not have been a cause for alarm. It did, however, serve a useful function. It served to indicate that although diphtheria is a controllable disease, it can just as easily escape from this control. It served to indicate that prevention is not wholly dependent upon the availability of a good protective agent such as diphtheria toxoid, and that the mere presence of diphtheria antitoxin will not save lives. Unless there is a sincere and conscientious effort directed toward vigilance against diphtheria, with full recognition of the seriousness of the disease when it does occur, the successful efforts of control of the past fifty years will have been in vain.

From the Detroit Department of Health.



# DIPHTHERIA CASES AND DEATHS DETROIT, MICHIGAN: 1900-1946



Following this somewhat delayed reawakening, this paper is intended, through historical and epidemiological approach, to trace the history of diphtheria in the City of Detroit and to re-emphasize the recommended procedures in diphtheria prevention and its treatment.

cent case fatality. It becomes obvious that the total period must be divided into two approximately equal parts, separated by the introduction of diphtheria toxin-antitoxin immunization into the regimen of preventive medicine in 1920. Each of these divisions will be discussed separately.

TABLE I. DIPHTHERIA INCIDENCE AND MORTALITY  
Detroit, Michigan—1900—1947

Year	Population	Cases		Deaths		Case Fatality Per Cent
		Number	Rate per 100,000	Number	Rate per 100,000	
1900	285,704	445	155.8	83	29.0	18.6
1901	293,675	278	94.7	53	18.0	19.1
1902	301,647	728	241.3	134	44.4	18.4
1903	309,619	1,181	381.4	222	71.1	18.8
1904	319,332	1,116	349.5	141	44.2	12.6
1905	340,224	685	254.2	118	34.7	13.6
1906	381,116	680	178.4	86	22.6	12.6
1907	407,439	629	154.4	80	19.6	12.7
1908	428,332	741	173.0	69	16.1	9.3
1909	449,225	994	221.3	109	24.3	11.0
1910	465,766	1,325	284.5	159	34.1	12.0
1911	499,030	1,356	271.7	167	33.5	12.3
1912	536,139	1,436	267.8	187	34.9	13.0
1913	567,920	2,722	479.3	274	48.2	10.1
1914	595,000	2,034	341.8	159	26.7	7.8
1915	678,746	1,987	292.7	116	17.1	5.8
1916	725,000	3,618	499.0	259	35.7	7.2
1917	825,000	4,476	542.5	410	49.7	9.2
1918	900,000	2,874	319.3	270	30.0	9.4
1919	926,000	3,596	388.3	307	33.2	8.5
1920	993,678	4,478	450.6	370	37.2	8.3
1921	942,000	4,689	497.8	334	35.4	7.1
1922	952,000	2,779	291.9	204	21.4	7.3
1923	1,050,000	2,424	230.8	205	19.5	8.4
1924	1,130,000	2,138	189.2	162	14.3	7.6
1925	1,242,044	1,615	130.0	118	9.5	7.3
1926	1,291,724	3,181	246.3	450	34.8	14.1
1927	1,334,500	2,458	184.2	278	20.8	11.3
1928	1,378,900	1,958	142.0	224	16.2	11.4
1929	1,429,200	2,658	186.0	310	21.7	11.7
1930	1,568,662	1,847	117.7	173	11.0	9.4
1931	1,527,605	1,053	68.9	96	6.3	9.1
1932	1,495,392	631	42.2	64	4.3	10.1
1933	1,483,274	496	33.4	51	3.4	10.3
1934	1,487,358	215	14.4	8	0.5	3.7
1935	1,550,000	220	14.2	10	0.6	4.5
1936	1,648,000	275	16.7	13	0.8	4.7
1937	1,658,000	353	21.3	26	1.6	7.4
1938	1,561,000	314	20.1	15	1.0	4.8
1939	1,600,000	211	13.2	7	0.4	3.3
1940	1,623,452	84	5.2	3	0.2	3.6
1941	1,690,000	94	5.6	4	0.2	4.2
1942	1,750,000	107	6.1	10	0.6	9.3
1943	1,790,000	97	5.4	7	0.4	7.2
1944	1,700,000	225	13.2	11	0.6	4.9
1945	1,685,000	217	12.9	16	0.9	7.4
1946	1,750,000	127	7.2	2	0.1	1.6
1947	1,785,000	55	3.1	3	0.2	5.4

The basic information in a survey of the disease experiences of a certain geographic area rests in an analysis and review of morbidity and mortality statistics coupled with epidemiological information, for example, age and sex distribution and seasonal variation. With this thought in mind, the authors present several tables and graphs, with a brief discussion of the significant points which they illustrate.

Table I and Figure 1 show the diphtheria experience of the City of Detroit during the forty-seven-year period from 1900 through 1946. They portray incidence or case rates per 100,000 population, mortality rates per 100,000 and the per

#### Incidence in Pre-Immunization Period—1900-1921

This period was ushered in by a low incidence rate of 94.7 per 100,000 population in 1901, a point not again reached until 1931, many years after the introduction of diphtheria prophylaxis. It should be noted that this low rate was the end of a rapidly decreasing trend dating back to 1891 when the incidence rate was 527 per 100,000, the second highest rate in the medical history of Detroit.

During these years there existed a rising trend line with a slowly decreasing rate of increase showing a tendency to drop off toward the latter part of the period.



General epidemiological observation in the United States indicated that in pre-immunization days, diphtheria incidence was cyclical in character, with peaks occurring about every three to five years. The Detroit experience shows a comparable cyclical recurrence. Five high periods may be observed in Figure 1, three of which are noteworthy and two of which are only slight deviations from the trend.

The first period of increased incidence, and the longest in duration, occurred in the years 1902-1906. It has already been noted that prior to 1901 there was a decreasing incidence. It is believed that this deviation from the trend represents the combined effects of cyclical recurrence of increased incidence and, in common with most communicable diseases that attain epidemic proportions, an increased number of susceptibles and probable increased virulence of the organism following a period of prolonged decline in incidence.

The rise in incidence following 1907 does not appear to be a phase of cyclical fluctuation, and apparently the Detroit health officials at the time were of the same opinion. A discussion of this three-year period of increasing incidence was reported in June, 1910, as "... not a real increase, only an apparent one due to physicians in Detroit ... paying more attention each year to suspicious looking throats ... and more cases ... are recognized and reported."<sup>1</sup>

This conclusion was based on the number of throat cultures submitted to the bacteriologist of the Board of Health, which also showed a steady increase during this period. It was the opinion of the health officials that the increase in cultures brought about an improved diagnosis, with the end result that mild cases which previously had been considered as tonsillitis were now being reported as diphtheria. The error may well have been also that some carriers with mild nonspecific throat inflammations were reported as cases.\*

The peaks of 1913, 1916-17 and 1921 would seem to be due to cyclical recurrence.

It is important at this point to review briefly the development of diphtheria immunization in Detroit. Without such background, interpretation of the remaining twenty-six years of the period under consideration would be meaningless.

\*Although specific information is lacking, it is interesting to speculate on the role played by periods of increased awareness and interest in diphtheria during the other upward surges of the incidence curve of Figure 1. It is also of interest to note that in the winter of 1913-14, Goldberger,<sup>2</sup> in a random sampling of 4,093 persons, showed 0.928 per cent to be carriers of the diphtheria bacillus, as determined by culture methods.

Although diphtheria antitoxin had been in therapeutic use for many years and distributed by the Detroit Department of Health since 1896, it was not until the fall of 1920 that this Department began to promote toxin-antitoxin as a prophylactic measure. During the first few years the work was confined to offering this material to children in schools and to the compulsory immunization of babies and preschool children who attended Department clinics. At the same time, some children, although the number is not believed to have been great, were immunized by their own physicians. Obviously, the extent of acceptance of this procedure early in the introductory period by both the medical profession and lay groups was not great, and the number of individuals immunized remained relatively small.

In 1926 and 1927, in addition to the work carried on during the preceding years, a considerable number of clinics were opened in various parts of the city, to which preschool and school children were invited. During these two years, a larger number of children were also immunized by their own physicians. By 1928 it was felt that the efficacy of diphtheria immunization had been amply demonstrated and that it was ready for general acceptance. On November 26, 1928, the work of diphtheria prevention was turned over to the practicing physicians of the city.†

†The change from clinics and private physicians to only private physicians was not made until a co-operative plan had been carefully worked out by the Public Health Committee of the Wayne County Medical Society and the Department of Health and the plan approved by the Wayne County Medical Society. This plan came to be known as the "Detroit Medical Participation Plan." Briefly, it provided that the physicians of the city would give toxin-antitoxin and Schick tests. The physicians agreed to designate certain hours at which time the service would be rendered for a prearranged fee. The parent was to pay \$1 for each dose of toxin-antitoxin and \$1 for the Schick test when able to do so; the Health Department was to pay \$.50 for each dose of toxin-antitoxin and \$1 for the Schick test, including reading, in indigent cases. Reports were to be made of all injections and Schick tests, and the Department agreed to supply free of charge toxin-antitoxin, Schick material, Schick heated control material, postal cards for reporting, and to keep records of all children immunized. Concomitantly, there was conducted a markedly extensive publicity campaign. This program included newspaper articles, paid newspaper advertisements, streetcar and bus advertisements, outdoor billboards, home visits by public health nurses and agents of the Metropolitan Life Insurance Company, short talks before PTA, Women's Clubs and other organizations, articles in periodicals and magazines, and radio talks. As a means of stimulating interest among children, particularly preschool children, the Children's Army Protecting Detroit Against Diphtheria was organized. The members of this group wore a green button with the indicated inscription. These buttons were sent to all children who reported as having received their toxin-antitoxin treatments, stating the name of the physician who gave them the treatment.

As the result of these new procedures, the immunization status of the city, according to age, on December 31, 1929, was as follows:

Under Five years .....	21.5%
5 to 10 years .....	64.3%
Total under 11 years .....	44.2%

According to age on December 31, 1930:

Under Five years .....	27.5%
5 to 10 years .....	71.0%
Total under 11 years .....	50.5%

A city-wide survey in the summer of 1932 indicated that 73.9 per cent of school children (5 to 9 years), 42 per cent of preschool children (0 to 4 years) and 25 per cent of infants as they attain their first birthday, have received at least one complete series of this immunizing agent.

**Incidence in Postimmunization Period—1921-1946**

The early years of this period may be viewed as a transition period during which time the immunization program of the Department of Health was gradually expanding and an ever-increasing number of individuals, particularly school children, received diphtheria prevention treatment.

It is probably the effect of this developing program, coupled with an expected cyclical decrease, which is reflected by the decreasing trend observable at this time. The combination of these two factors apparently served to increase the rate of decline.

The decreasing trend was abruptly interrupted in 1926. In this year, an increase in incidence was also noted for many other communicable diseases, including measles, whooping cough and scarlet fever.\*\*

Following a slight increase in 1929, which was probably due to increased reporting of diphtheria aroused by the publicity of 1926-1928, there occurred a very rapid decline through to 1935 when the rate of 14.2 was recorded.

During the years 1936-1939 there occurred the first upward swing in incidence comparable to pre-immunization days. This possibly reflected the leveling-off of immunization activity as far as the majority of susceptibles was concerned and a resumption of the cyclical character of the incidence of the disease previously obscured by the weighty impact of extensive immunization.

A decline then continued through to 1940 when the rates leveled off for three years only to undergo an increase during 1944 and 1945. A combination of factors would again appear to be involved, namely, cyclic recurrence and war mobilization with population shifts that saw increases in the number of diphtheria cases in many parts of the United States.<sup>3</sup> Epidemics of diphtheria in areas of Europe at this time have already been mentioned.

The year 1946 showed a decrease in incidence

\*\* This rise was especially noticeable in mortality figures. Whereas the death rate for all causes was 11.0 per 1,000 in 1925, the lowest reached to that date, this rate rose to 12.5 per 1,000 in 1926, the rise being attributed to the marked increase in communicable disease deaths.

The increased incidence in diphtheria was not noted until the month of July; the first six months had an unusually low incidence. According to reports issued by the Department of Health at that time, this period of increase was characterized by cases of unusually severe clinical type.

The alarm aroused by the severity of the disease caused the institution of a diphtheria prevention campaign utilizing all possible advertisement facilities coupled with the establishment of twenty-one special clinics. It is stated that during the latter six and one-half month period of 1926, about 88,500 individuals were provided with protective treatments against diphtheria. This activity greatly stimulated the immunization program which was just gaining impetus.

and the rate for 1947 (not plotted in Figure 1) attained the figure of 3.1 per 100,000, the lowest rate ever recorded in the City of Detroit. Preliminary reports for the first six months of 1948 suggest that the rate may go even lower.

**Mortality**

The curve for mortality very closely parallels that for incidence. Only in the years 1908 and 1921 did the two progress in opposite directions. In both instances, incidence increased while mortality decreased.† The wider fluctuation in rates of change of the mortality curve as compared with that for incidence is, in part, a mathematical reflection of the comparatively smaller number of deaths. In many instances, however, case fatality rates show that real changes did occur in the ratio of deaths to cases of diphtheria.

It is important to note that the year 1946 represents the closest approximation in the entire period reviewed of a state of complete absence of fatality from diphtheria. Perhaps the long-sought but scientifically unobtainable "Utopiae Medicina" is not completely in the realm of fantasy. At any rate, it does indicate the real effect of diligent application of a potent therapeutic weapon.

**Case Fatality**

Inasmuch as antitoxin therapy was introduced in Detroit in 1896, it is of considerable interest to examine the data available for the years prior to 1900, as follows:

YEAR	CASES	DEATHS	CASE FATALITY (Per Cent)
1891	1,127	272	24.1
1892	1,156	341	29.5
1893	639	173	27.1
1896	842	234	27.8
1897	1,026	223	21.7
1898	460	90	19.6
1899	579	114	19.7

It would appear that the introduction of anti-toxin therapy effected a very slowly decreasing trend in case fatality. As compared with the curves for morbidity and mortality, case fatality has shown relatively little change despite the manifold variations in therapy during the past fifty years.

During the period of study, with each outbreak of diphtheria, as discussed under "Incidence," there was a proportionately greater increase in the number of deaths giving an increased case fatality rate. This is undoubtedly directly related to the factors of bacterial virulence and group susceptibility.

† The year 1947 saw a slight increase in mortality while incidence decreased.



ity which gave rise to the outbreak originally. Such an observation is especially true in the period following the outbreak of 1926. It was not until eight years later, in 1934, that the case fatality rate resumed the low level attained prior to the epidemic.

possess statistical significance and must be viewed as a real difference.

The cause for this sex difference in the total group becomes apparent upon review of Table IIIb. In this table, the total group has been distributed according to age (under fifteen years and

TABLE II. DIPHTHERIA CASES BY MONTH OF OCCURRENCE  
Detroit, Michigan—1937—1946

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1937	37	26	23	22	29	43	32	13	22	35	39	32
1938	31	28	14	16	10	22	19	13	18	48	59	36
1939	20	24	26	22	29	6	10	17	4	12	25	16
1940	14	11	2	1	6	3	4	4	5	10	17	7
1941	13	8	14	4	3	3	3	6	8	6	9	17
1942	13	12	16	5	9	5	4	5	1	21	6	10
1943	7	5	6	13	6	6	4	2	4	22	12	10
1944	13	7	17	10	13	20	15	13	10	35	47	25
1945	33	13	19	13	22	23	17	9	19	15	17	17
1946*	7	23	15	7	10	7	10	17	4	2	15	10
Total	188	157	152	113	137	138	118	99	95	206	246	180
Per Cent Total Period	10.3	8.6	8.3	6.2	7.5	7.5	6.4	5.4	5.2	11.3	13.4	9.8

\*Number cases, 1947:

Jan. 10  
Feb. 4  
Mar. 10

Apr. 5  
May 9  
June 2

July 1  
Aug. 3  
Sept. 4

Oct. 0  
Nov. 2  
Dec. 1

TABLE IIIA. DIPHTHERIA CASES ACCORDING TO SEX  
Detroit, Michigan—1938—1947

Year	Total Number Cases	Male		Female	
		Number Cases	Per Cent Total	Number Cases	Per Cent Total
1938	314	163	51.9	151	48.1
1939	211	89	42.3	122	57.8
1940	84	39	46.4	45	53.6
1941	94	43	45.7	51	54.3
1942	107	60	56.1	47	43.9
1943	97	48	49.5	49	50.5
1944	225	108	48.0	117	52.0
1945	217	106	48.8	111	51.2
1946	127	53	41.7	74	58.3
1947	55	18	32.7	37	67.3
Total	1,531	727	47.5	804	52.5

### Seasonal Distribution of Cases

The ten-year cumulative review shown in Table II, and Figure 2, indicates a seasonal cycle characterized by the highest frequency during the months of late fall and early winter, with a slight secondary rise during the months of May and June.

### Sex Distribution

It is commonly believed that there is a negligible sex differentiation in cases of diphtheria. Examination of Table IIIa indicates that this is not so for the City of Detroit, at least so far as the ten-year period under consideration is concerned. The predominance of females over males (1.106 females for every male), though not particularly great, does over fifteen years.) In the former group, in which

80 per cent of the cases occur, there are only 0.955 females per male. In those individuals over fifteen years of age, however, there are more than twice as many females as males.

It is believed that the difference noted in Table IIIa for the total group is a reflection of the great sex differentiation observed in individuals over fifteen years of age. Why this should be the case in the older age group cannot be definitely stated. Speculation may include the factor of mothers, school teachers and student nurses being included in this group, with their potential increased opportunity for exposure to cases of the disease. It is believed that this difference is not based upon an inherent difference in the two sexes with regard to susceptibility.

### Age Distribution—Incidence

In general, each of the four age groups represented in Figure 3 portrays a descending trend line comparable to that discussed for all ages in Figure 1. (Exact statistics are given in Table IV).

Ranked in order of decreasing frequency are age groups 5-9, 0-4, 10-14 and 15-plus; at no time in the twenty-seven-year period was age group 5-9 exceeded by any other age group.\*

\* Although population statistics by age are not available for calculation of specific rates, incidence figures for 1947 show almost twice as many cases in age group 0-4 than are reported for group 5-9 years.

# DIPHTHERIA—MOLNER, DOUGLAS AND RASKIN

TABLE IIIB. DIPHTHERIA CASES ACCORDING TO SEX AND AGE  
Detroit, Michigan—1938—1947

Year	Under 15 Years					Over 15 Years				
	Number Cases	Male		Female		Number Cases	Male		Female	
		Number	Per Cent	Number	Per Cent		Number	Per Cent	Number	Per Cent
1938	286	156	54.5	130	45.5	28	7	25.0	21	75.0
1939	168	76	45.2	92	54.8	43	13	30.2	30	69.8
1940	67	35	52.2	32	47.8	17	4	23.5	13	76.5
1941	75	40	53.3	35	46.7	19	3	15.8	16	84.2
1942	79	45	57.0	34	43.0	28	15	53.6	13	46.4
1943	73	40	54.8	33	45.2	24	8	33.3	16	66.7
1944	187	92	49.2	95	50.8	38	16	42.1	22	57.9
1945	155	81	52.2	74	47.8	62	25	40.3	37	59.7
1946	94	48	51.1	46	48.9	33	5	15.2	28	84.8
1947	40	13	32.5	27	67.5	15	5	33.3	10	66.7
Total	1,224	626	51.1	598	48.8	307	101	32.9	206	67.1

DIPHTHERIA CASES BY MONTH OF ONSET  
DETROIT, MICHIGAN' 1937 - 1946

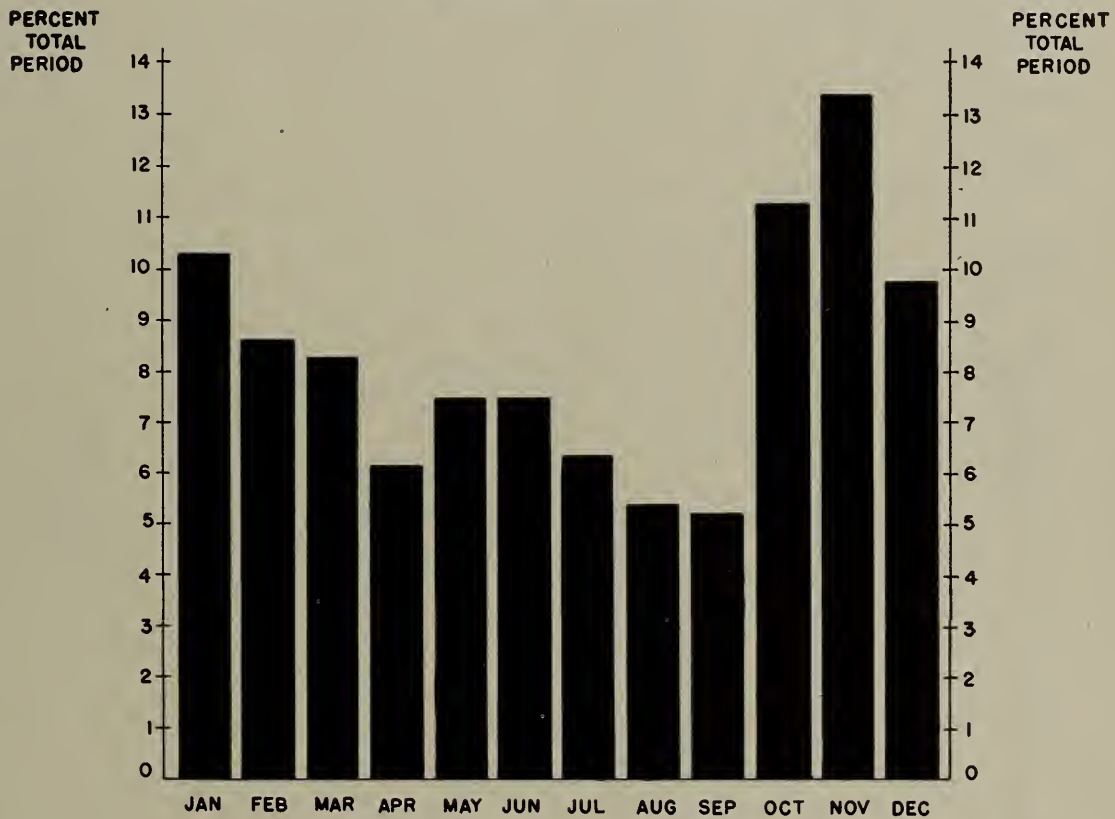


FIGURE 2

Following the rather sharp decline from the beginning of the period to 1934, during which time all four curves were closely parallel, each curve appears to assume an independent character. This is particularly true of age group 5-9 years.

It was noted in Figure 1 that the years 1936-1939 represented the first deviation from the downward trend since the introduction of diphtheria immunization. From Figure 3, it may be

observed that this increase in case rates was principally due to a rather marked rise in incidence in age group 5-9 years. Age groups 0-4 and 10-14 also contributed to this increase, but over a much shorter period of time. Age group 15-plus, during this entire period, continued its slowly decreasing course with only a slight increase in 1937.

It was also observed in Figure 1 that the years 1944 and 1945 represented a period of relatively



DIPHTHERIA CASES BY AGE  
SPECIFIC RATES PER 100,000  
DETROIT, MICHIGAN: 1920-1946

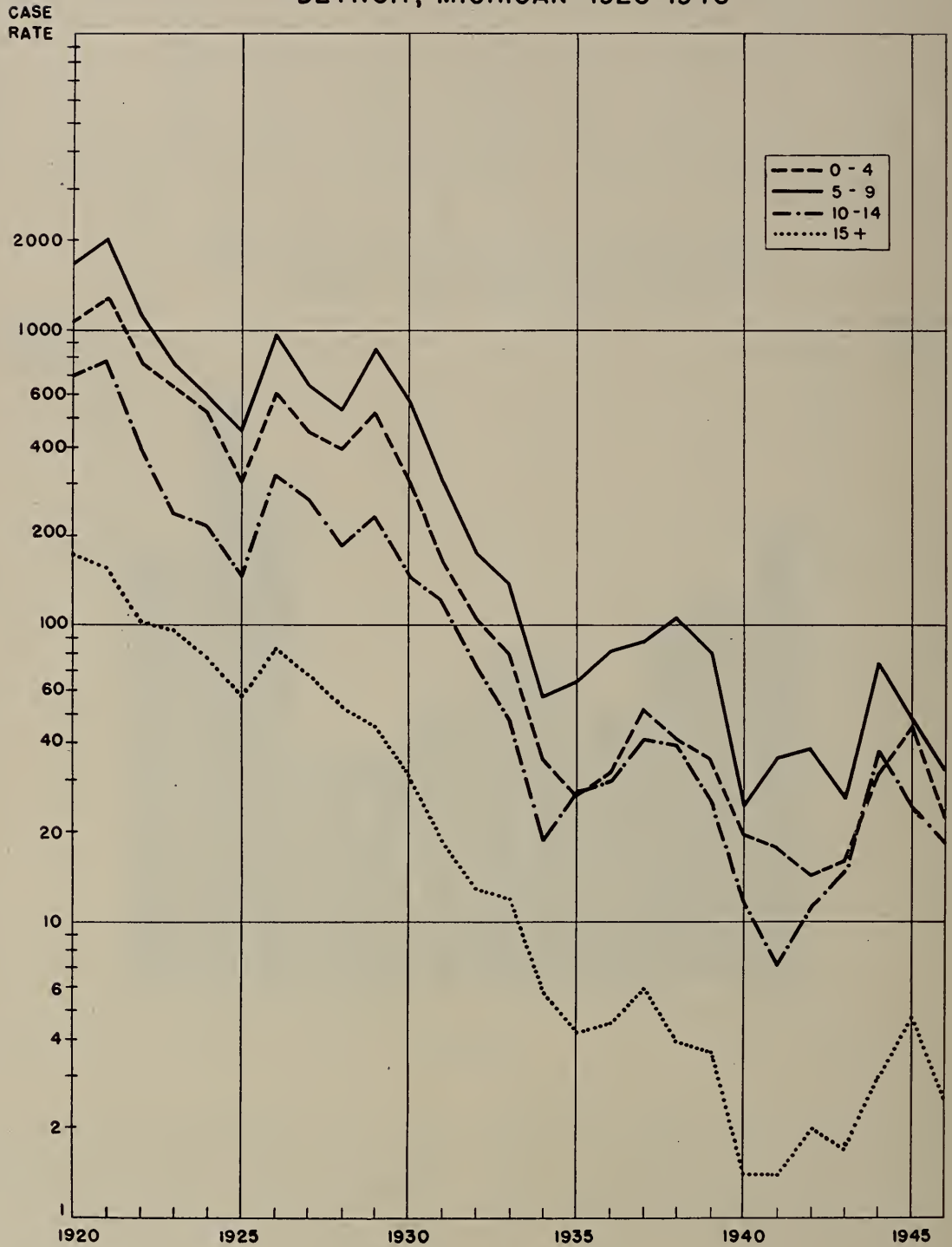


FIGURE 3

DIPHThERIA—MOLNER, DOUGLAS AND RASKIN

TABLE IV. DIPHThERIA CASES BY AGE—SPECIFIC RATES PER 100,000  
Detroit, Michigan—1920—1947

Year	0-4 Years			5-9 Years			10-14 Years			15+ Years		
	Population	Number Cases	Rate per 100,000	Population	Number Cases	Rate per 100,000	Population	Number Cases	Rate per 100,000	Population	Number Cases	Rate per 100,000
1920	112,117	1,211	1,080.1	88,245	1,490	1,688.5	68,702	486	707.4	724,614	1,291	178.2
1921	106,163	1,390	1,299.9	83,650	1,690	2,020.3	65,186	520	797.7	687,001	1,089	158.5
1922	107,290	849	791.3	84,538	950	1,123.8	65,878	264	400.7	694,294	716	103.1
1923	108,465	700	645.4	103,320	786	760.7	87,465	209	239.0	750,750	729	97.1
1924	116,729	629	538.8	111,192	668	600.8	94,129	204	216.7	807,950	637	78.8
1925	128,467	397	309.0	122,390	546	446.1	103,312	152	147.1	887,875	520	58.6
1926	133,435	824	617.5	127,106	1,234	970.8	107,601	350	325.3	923,582	773	83.7
1927	137,854	617	447.6	131,315	886	674.7	111,164	294	264.5	954,167	661	69.3
1928	128,927	510	395.6	130,168	701	538.5	117,207	220	187.7	1,002,598	527	52.6
1929	133,630	716	535.8	134,917	1,172	868.7	121,482	291	239.5	1,039,171	479	46.1
1930	140,670	454	309.5	148,082	837	565.2	133,336	196	147.0	1,140,574	360	31.6
1931	141,663	239	168.7	143,999	445	309.0	129,846	159	122.4	1,112,097	210	18.9
1932	137,699	147	106.8	142,221	249	175.1	127,108	94	74.0	1,088,364	141	13.0
1933	135,921	110	80.9	142,787	196	137.3	126,078	60	47.6	1,078,488	130	12.0
1934	139,007	49	35.2	140,406	79	56.3	126,425	24	19.0	1,081,460	63	5.8
1935	144,925	39	26.9	146,320	96	65.6	131,750	36	27.3	1,127,005	49	4.3
1936	154,022	50	32.5	155,670	128	82.2	140,014	42	30.0	1,198,294	55	4.6
1937	155,023	83	53.5	156,515	138	88.2	140,930	59	41.9	1,205,532	73	6.0
1938	145,954	59	40.4	147,358	156	105.9	132,685	53	39.9	1,135,003	46	4.0
1939	115,692	41	35.4	112,694	90	79.9	132,117	34	25.7	1,239,494	46	3.7
1940	117,389	23	19.6	114,346	28	24.5	134,054	16	11.9	1,257,663	17	1.4
1941	122,200	22	18.0	119,033	43	36.1	139,548	10	7.2	1,309,216	19	1.4
1942	139,461	20	14.3	116,699	45	38.6	125,475	14	11.2	1,368,372	28	2.0
1943	142,649	23	16.1	119,366	31	26.0	128,335	19	14.8	1,399,650	24	1.7
1944	145,139	46	31.7	123,078	93	75.6	124,665	47	37.7	1,307,118	39	3.0
1945	145,478	67	46.0	123,070	59	47.9	120,120	29	24.1	1,296,332	62	4.8
1946	146,492	33	22.5	123,590	40	32.4	115,338	21	18.2	1,364,580	33	2.4
1947	155,131	24	15.5	126,802	13	10.3	112,587	3	2.7	1,390,480	15	1.1

TABLE V. PERCENTAGE DISTRIBUTION OF DIPHThERIA CASES BY AGE  
Detroit, Michigan—1920—1947

Year	Total All Ages	Age Group								Median Age
		0-4		5-9		10-14		15 +		
		Number Cases	Per Cent Total	Number Cases	Per Cent Total	Number Cases	Per Cent Total	Number Cases	Per Cent Total	
1920	4,478	1,211	27.0	1,490	33.3	486	10.8	1,291	28.8	8.45
1921	4,689	1,390	29.6	1,690	36.0	520	11.1	1,089	23.2	7.82
1922	2,779	849	30.6	950	34.2	264	9.5	716	25.8	7.84
1923	2,424	700	28.9	786	32.4	209	8.6	729	30.1	8.26
1924	2,138	629	29.4	668	31.2	204	9.5	637	29.8	8.30
1925	1,615	397	24.6	546	33.8	152	9.4	520	32.2	8.76
1926	3,181	824	25.9	1,234	38.8	350	11.0	773	24.3	8.10
1927	2,458	617	25.1	886	36.0	294	12.0	661	26.9	8.46
1928	1,958	510	26.0	701	35.8	220	11.2	527	26.9	8.34
1929	2,658	716	26.9	1,172	44.1	291	10.9	479	18.0	7.62
1930	1,847	454	24.6	837	45.3	196	10.6	360	19.5	7.80
1931	1,053	239	22.7	445	42.3	159	15.1	210	19.9	8.23
1932	631	147	23.3	249	39.5	94	14.9	141	22.3	8.38
1933	496	110	22.2	196	39.5	60	12.1	130	26.2	8.52
1934	215	49	22.8	79	36.7	24	11.2	63	29.3	8.70
1935	220	39	17.7	96	43.6	36	16.4	49	22.3	8.70
1936	275	50	18.2	128	46.5	42	15.3	55	20.0	8.42
1937	353	83	23.5	138	39.1	59	16.7	73	20.7	8.39
1938	314	59	18.8	156	49.7	53	16.9	46	14.6	8.14
1939	211	41	19.4	90	42.6	34	16.1	46	21.3	8.59
1940	84	23	27.4	28	33.3	16	19.0	17	20.2	8.39
1941	94	22	23.4	43	45.7	10	10.6	19	20.2	7.91
1942	107	20	18.7	45	42.0	14	13.1	28	26.2	8.74
1943	97	23	23.7	31	32.0	19	19.6	24	24.7	9.11
1944	225	46	20.4	93	41.3	47	20.9	39	17.3	8.58
1945	217	67	30.9	59	27.2	29	13.4	62	28.6	8.52
1946	127	33	26.0	40	31.5	21	16.5	33	26.0	8.81
1947	55	24	43.6	13	23.6	3	5.4	15	27.3	6.35
Total Period	34,944	9,348	Mn 26.8 Md 24.6	12,876	Mn 36.8 Md 38.8	3,903	Mn 11.2 Md 12.1	8,817	Mn 25.2 Md 24.3	

marked increase in incidence. It is interesting to note from Figure 3 that although all ages were involved in the 1944<sup>a</sup> experience, only age groups 0-4 and 15-plus are represented in 1945, the other groups having already begun to decrease.

The rise to the wartime peak of age group 5-9 in 1944 would seem to have started in 1941, but

was temporarily interrupted in 1943 by factors which remain unknown. The curves for the other age groups seem to lend support to this idea. As was noted for the years 1936-1939, age group 0-4 again lagged behind 5-9 in assuming an upward trend.

Another means of viewing the age characteristics



of cases of diphtheria is by examination of the percentage distribution of the various age groups as compared with the total number of cases in any given year. Table V and Figure 4 present this data.

cent. Age groups 0-4 and 15-plus appear to be about equal, with approximately one-fourth of the cases included in each and 13.2 per cent included in age group 10-14.

The median age for all cases has varied but

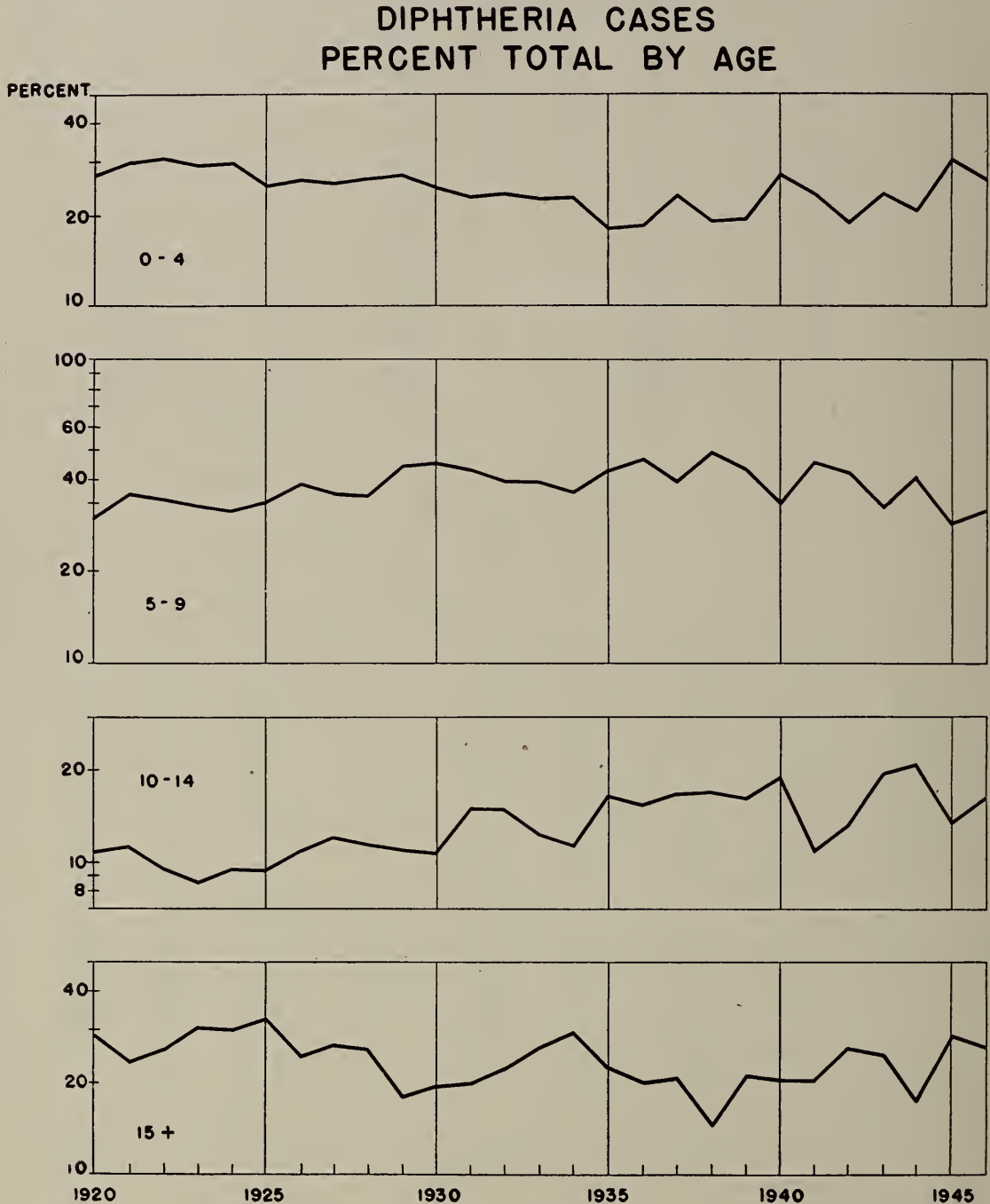


FIGURE 4

Evidence is again provided indicating the largest concentration of cases in age group 5-9. The mean per cent value for the twenty-seven-year period is 36.8 per cent (median of 38.8 per cent) with values ranging from 27.2 per cent to 49.7 per

cent. Age groups 0-4 and 15-plus appear to be about equal, with approximately one-fourth of the cases included in each and 13.2 per cent included in age group 10-14.

The median age for all cases has varied but

# DIPHTHERIA—MOLNER, DOUGLAS AND RASKIN

TABLE VI. DIPHTHERIA DEATHS BY AGE—SPECIFIC RATES PER 100,000  
Detroit, Michigan—1920—1947

Year	0-4 Years			5-9 Years			10-14 Years			15+ Years		
	Population	Number Deaths	Rate per 100,000	Population	Number Deaths	Rate per 100,000	Population	Number Deaths	Rate per 100,000	Population	Number Deaths	Rate per 100,000
1920	112,117	216	192.6	88,245	111	125.8	68,702	16	23.3	724,614	27	3.7
1921	106,163	198	186.5	83,650	99	118.4	65,186	22	33.7	687,001	15	2.2
1922	107,290	131	122.1	84,538	59	69.8	65,878	4	6.1	694,294	10	1.4
1923	108,465	128	118.0	103,320	55	53.2	87,465	4	4.6	750,750	18	2.4
1924	116,729	91	78.0	111,192	50	45.0	94,129	10	10.6	807,950	11	1.4
1925	128,467	63	49.0	122,390	36	29.4	103,312	6	5.8	887,875	13	1.5
1926	133,435	220	164.9	127,106	182	143.2	107,601	31	28.8	923,582	17	1.8
1927	137,854	123	89.2	131,315	117	89.1	111,164	23	20.7	954,167	15	1.6
1928	128,927	115	89.2	130,168	82	63.0	117,207	9	7.7	1,002,598	18	1.8
1929	133,630	133	99.5	134,917	140	103.8	121,482	19	15.6	1,039,171	18	1.7
1930	146,670	72	49.1	148,082	80	54.0	133,336	11	8.3	1,140,574	10	0.9
1931	141,663	42	29.6	143,999	40	27.8	129,846	6	4.6	1,112,097	8	0.7
1932	137,699	28	20.3	142,221	23	16.2	127,108	10	7.9	1,088,364	3	0.3
1933	135,921	16	11.8	142,787	23	16.1	126,078	5	4.0	1,078,488	7	0.6
1934	139,007	5	3.6	140,406	2	1.4	126,425	1	0.8	1,081,460	0	0.0
1935	144,925	3	2.1	146,320	7	4.8	131,750	0	0.0	1,127,005	0	0.0
1936	154,022	5	3.2	155,670	6	3.8	140,014	1	0.7	1,198,294	1	0.1
1937	155,023	13	8.4	156,515	7	4.5	140,930	1	0.7	1,205,532	5	0.4
1938	145,954	5	3.4	147,358	7	4.8	132,685	2	1.5	1,135,003	1	0.1
1939	115,692	1	0.9	112,694	5	4.4	132,117	0	0.0	1,239,494	1	0.1
1940	117,389	1	0.8	114,346	0	0.0	134,054	0	0.0	1,257,663	2	0.2
1941	122,200	1	0.8	119,033	3	2.5	139,548	0	0.0	1,309,216	0	0.0
1942	139,461	5	3.6	116,699	2	1.7	125,475	1	0.8	1,368,372	1	0.1
1943	142,649	2	1.4	119,366	3	2.5	138,335	1	0.7	1,399,650	1	0.1
1944	145,139	3	2.1	123,078	5	4.1	124,665	2	1.6	1,307,118	1	0.1
1945	145,478	8	5.5	123,070	1	0.8	120,120	2	1.7	1,296,332	5	0.4
1946	146,492	2	1.4	123,590	0	0.0	115,338	0	0.0	1,364,580	0	0.0
1947	155,131	2	1.3	126,802	1	0.8	112,587	0	0.0	1,390,480	0	0.0
Mean Per Cent of Total Deaths	51.4			36.1			5.9			6.6		

ages, school children and young adults as compared with the preschool group. This apparently is not true in Detroit, at least not in recent years. Such would seem to have been the situation during 1920-1936, but at approximately 1936 the upward trend of age group 5-9 and the downward trend of 0-4 were reversed and these trends have continued to the present date.\*\* Whether or not this is merely a phase of a long term cyclical trend cannot be stated. Age group 10-14 has followed a consistently rising trend throughout the entire period, while age group 15-plus has shown little change.

## Age Distribution—Mortality

The age distribution of deaths from diphtheria presents a picture in direct contrast to that for cases or incidence (Table VI, Fig. 5). Whereas the highest incidence occurred in age group 5-9 years, age group 0-4 rather consistently possessed the highest mortality rates, showing a mean per cent-age value of 51.4 per cent of total deaths for the twenty-eight-year period.

A sharp decline in mortality rates is observable in these two groups during the first fourteen years of the period under consideration, whereas such was not the case in the older age groups.

Comparable to the trend for incidence (Fig. 3) 1935 saw a sudden cessation of this rapid decline,

with a leveling-off of the mortality rates, but here the absolute frequency of deaths had reached about the lowest level possible without complete absence of mortality. Three exceptions in age group 0-4 years may be noted, namely, 1937, 1942 and 1945, during which years there was a real increase in the number of deaths. Except for 1942, this corresponds with increases in incidence.

During the period following 1934, age group 0-4 was the only group in which no year passed without at least a single death occurring. Each of the other groups presents a "shotty" graphic presentation due to the absence of deaths in different years.

## Statistical Summary

Thus, from all the statistical data presented in the tables and graphs, certain general conclusions may be derived, as follows:

1. Because of the preventive and therapeutic weapons developed in the past fifty years, there has been a marked reduction in the incidence and mortality from diphtheria. However, there has not been a comparable decrease in case fatality.

2. Diphtheria remains a disease of children, 80 per cent of the cases and 93 per cent of deaths occurring among persons under fifteen years of age. In this group, sex differentiation is negligible.

3. Seasonal aspects of the disease show the greatest concentration of cases in late fall and early winter, with a minor secondary rise in May and June.

\*\*The experience of 1947, Table V, strongly supports this observation.



DIPHThERIA DEATHS BY AGE  
SPECIFIC RATES PER 100,000  
DETROIT, MICHIGAN: 1920-1946

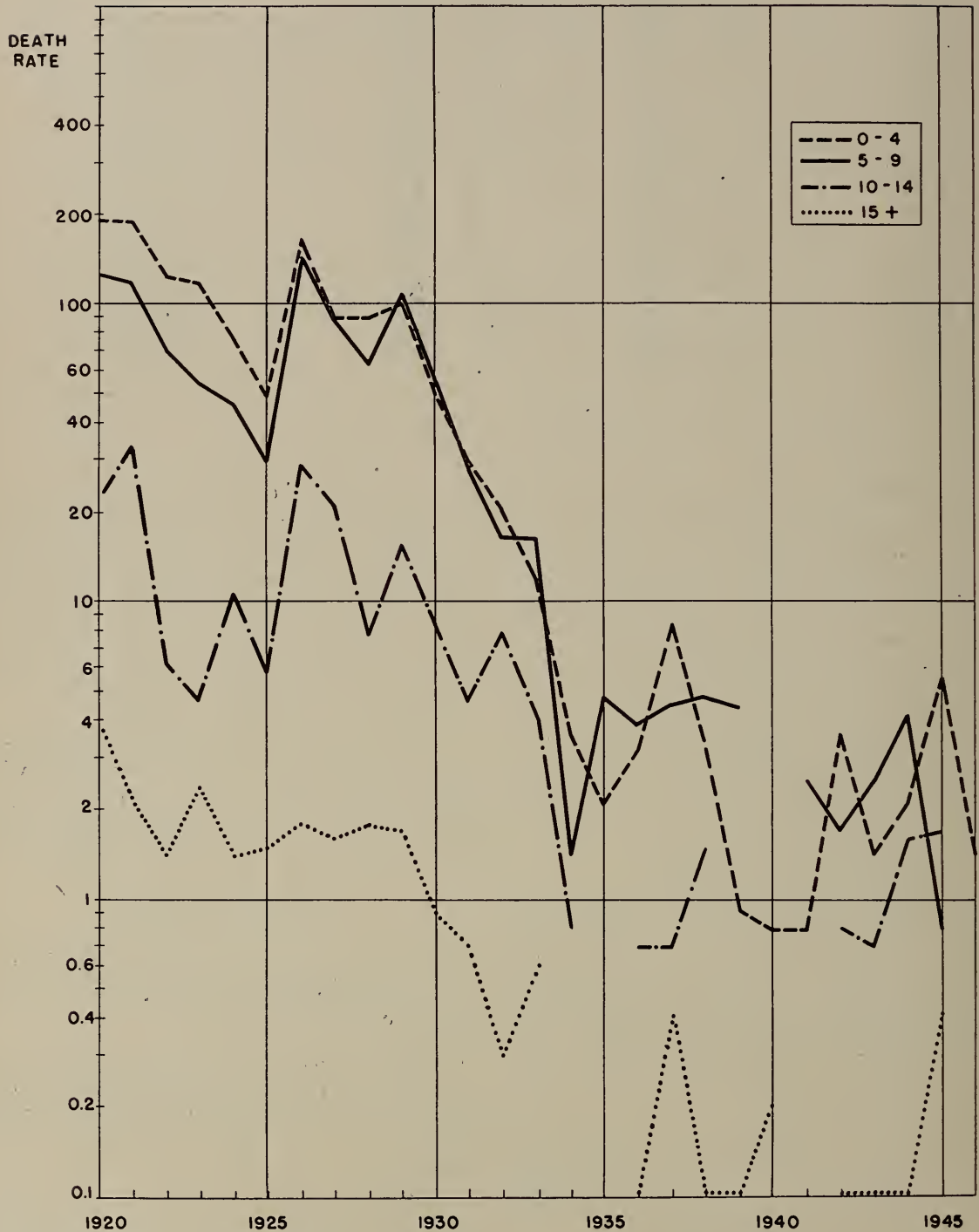


FIGURE 5

Although one cannot deny a feeling of great satisfaction in viewing the remarkable progress in the fight against diphtheria, it must be re-emphasized that its keynote is "eternal vigilance," and that complacency has no place in this fight. Therefore, the writers believe that it would not be superfluous to recall certain clinical characteristics of this disease.

### Briefed Diagnostic Characteristics

The early symptomatology of diphtheria is not striking. Usually the onset is insidious. The temperature may be normal or slightly elevated. Temperatures early in the disease are from 99° to 101° F. Sore throat is usually only moderate, and there appear, on inspection, localized areas of dusky redness. The throat may not appear particularly inflamed. The characteristic membrane may or may not be present. Laryngeal diphtheria and tracheobronchial diphtheria are especially difficult to diagnose. In some of these cases even the culture may be negative.

*All sore throats in which there may be suspicion of diphtheria, for example, purulent nasal discharge, exudate or membrane on tonsil or pharynx, and hoarseness, should be cultured.*

### Treatment of Cases

Regardless of the type organism or degree of invasiveness, main reliance in the treatment of diphtheria is on the early use of antitoxin. The dictum still holds that prognosis in diphtheria is dependent upon the day of the disease on which antitoxin is first given. Suspected cases of diphtheria should receive at least 20,000 units of antitoxin; definitely diagnosed cases should receive from 20,000 to 100,000 units. Penicillin appears to have bacteriostatic value *in vitro* but is of no value in neutralizing toxin, and therefore cannot be considered to be a substitute for antitoxin.

All cases of diphtheria should be hospitalized.

### Treatment of Contacts

Contacts to cases, whether or not they have had diphtheria protection treatments, should be observed daily for probable infection for seven days after contact has been broken.

Contacts who have had recent negative Schick tests or who have received diphtheria toxoid should be observed daily for possible clinical signs and symptoms of the disease.

If contacts cannot be observed daily, they should

be given 5,000 to 10,000 units of antitoxin prophylactically.

Contacts who have had no diphtheria protection should be given prophylactic doses of antitoxin.

Frequent culturing of contacts is indicated.

### Active Protection

Recently the Detroit Department of Health, in co-operation with the Wayne County Medical Society, has altered its recommendations on the administration of diphtheria toxoid. Recommendations now are as follows:

1. Two doses of alum-precipitated toxoid are administered one month apart between the ninth and twelfth months of life.

2. Six months later, the patient is Schick-tested. If the Schick test is positive, an additional dose of alum-precipitated toxoid is administered.

3. On entrance to school, or at about age five years, and not less than three years after the administration of the last dose of toxoid, a child should be given an additional dose of alum-precipitated toxoid, frequently referred to as the "booster dose."

4. In the face of a local outbreak, children who have not received diphtheria protection treatments in the three years preceding the outbreak should be administered a booster dose.

5. Care should be exercised in the administration of alum-precipitated toxoid to persons over the age of ten years because of the increased frequency of untoward reactions in this group. Plain toxoid is less apt to give a severe reaction at this age.

6. Diphtheria immunization treatments should be considered up to sixteen years of age.

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MSMS

The real reason for the high-pressure drive for compulsory health insurance is that the supporters of political medicine see the opportunity for establishing a medical bureaucracy slipping through their hands. More than 52 million people in this country already have provided themselves with voluntary health insurance to cushion the economic shock of illness. That's a splendid start toward meeting the problem and our campaign will be designed to make all the people of the country health insurance conscious—and let them know that the finest kind of medical care can be bought on a prepaid basis, without government interference or political meddling.—R. B. ROBINS, M.D.



# Why "Insanity" Hearings Are Voided by the Court

## *Suggestions Regarding Physicians' Certificates of Insanity*

By R. A. Morter, M.D.  
Kalamazoo, Michigan



IT WAS A MOST pathetic courtroom scene. The defendant in a sanity hearing was a sweet little elderly woman who could have been your mother or my mother. She was straining every nerve in her body trying to comprehend the proceedings being taken against her. She could not believe the statements the doctors

had made regarding her behavior. She could not understand why her own flesh and blood had testified against her. Her weakened brain and her confused mind faltered as she turned to her daughter and asked "Where is Pa?" Her memory and comprehension were grossly defective. She did not realize that "Pa," her husband, had passed away some ten years ago. The statute required her to be present in court on the day of her hearing because the certifying physicians had not certified that it was improper and unsafe for her to be present in court.

There was a basic revision and consolidation of the Michigan insanity laws in the year 1903. Since that date, minor changes have been made. The time for a new revision of the insanity laws is long past due. At the present time there is some agitation for certain revisions, but we believe drastic changes should be made.

The word "insanity" should not be used by medical men except as required in the courtroom. Methods of admitting the mentally ill to hospitals should be more simple and more humane. We need new methods of extending enforced medical care to the unwilling patient, while at the same time protecting his constitutional rights. Until that day comes, we physicians must conform to the present law.

Dr. Morter has been on the medical staff, Kalamazoo State Hospital, for thirty-four years, and has been medical superintendent for eighteen years.

During recent months we have heard much about patients being discharged from the Michigan State Hospitals, from the Coldwater State Home and Training School, and the Lapeer State Home and Training School by circuit court order after the hearing of a writ of habeas corpus. In some of these cases the medical superintendent of the hospital was unaware that the release of the patient was being sought until the writ was served upon him. In most cases the writ was initiated by an attorney at the request of the patient. All of these patients had been under the close observation of the medical superintendents, and had been considered for parole, but in the judgment of the medical superintendents such parole was considered detrimental to the public welfare or injurious to the patient.

These writs were based upon alleged errors in the commitment procedure followed by the probate court which issued the order of commitment. In none of the insane cases was the patient's mental state questioned. In the great majority of these cases the writ was granted, and the patient discharged from the hospital or training school, because the patient did not appear in probate court on the day of his hearing, and there was nothing in the probate court files to indicate that it was improper and unsafe for the patient to be present in court.

The statute (Public Acts 1937, No. 104, Sec. 10 and 11), provides that:

"... Such alleged mentally diseased person shall have the right to be present at such hearing, unless it shall be made to appear to the court, either by the certificate of the medical superintendent in charge of such hospital, home or retreat to which he may have been temporarily admitted, or by the certificate of two (2) reputable physicians, that his condition is such as to render his removal for that purpose, or his appearance at such hearing improper and unsafe."

The great majority of mental cases should not appear in court, because there are many who would create a scene, while others would be so confused and bewildered that they could not assist in their defense. The statute covering appearance in court is quite clear, and the legal proceedings in this respect can be fully complied with if the physicians will make their certificates clear, understandable, and give adequate reasons why the patient should not appear in court. There are certain patients which should by all means appear

in court. These are the persons with paranoid conditions, who are perplexed about the proceedings and are given to litigation.

The author has been present in circuit court during recent months to defend a total of fifty-two writs of habeas corpus. In fifty cases the patients were discharged from the hospital because of illegal commitment, while in only two cases the commitment was held legal and the writ denied. In the cases in which patients were discharged, several errors on the part of the commitment proceedings were alleged in the petition for the writ. At each hearing the patient's presence in court was always the first alleged error to be argued. As soon as it was established that the statute regarding "appearance in court" was not met, the order was immediately nullified and the patient was ordered discharged. However, in almost every case the presiding judge commented on the inadequacy of the physicians' certificates.

When the probate court proceedings become infallible, the physicians' certificates will be attacked. The great majority of physicians' certificates which have come under my observation would not be acceptable to the circuit judges whom I have known.

Physicians' certificates of insanity are being criticized. The physician who is called upon to file a certificate of insanity is often irked and may not co-operate fully with the probate court because he is inadequately paid for his services. It is the custom in many probate courts to pay the minimum fee of five dollars and traveling allowance for making the examination and certifying as to the patient's mental condition. Quoting from the statute:

"Each physician making such examination and certifying as to the mental condition of such person, shall, regardless of whether he finds such person to be mentally diseased or not, be entitled to receive for such services a sum of not less than five dollars, and ten cents per mile for travel necessarily performed in going to the place of such examination, and such further sum for expenses as the Probate Court shall allow."

If judges of probate cannot see fit to pay more than the minimum under the present law, the physician should consider his certificate a public service until such time as the present law can be amended and adequate fees paid for his services.

The statute declares that:

"Certificates of such physicians to authorize commitment must show that it is their opinion that the person is actually insane, or feeble-minded, or epileptic, as the case may be, and shall contain the facts and circumstances upon which the opinion of the physician is based, and show that the condition of the person examined is such as to require care and treatment in an institution for the care, custody, and treatment, of such mentally diseased persons."

The physicians' certificates should not be based upon hearsay. The certificates should not be a compilation of conclusions. A physician's certificate may contain historical data relative to the patient's behavior, and if it does the names and addresses of the relatives or friends giving this data should be given in his certificate. This hearsay or historical data is classed as "circumstances." The "facts" alluded to in the statute refers to the physician's actual observations and conclusions as a result of his examination of the patient. These "facts and circumstances," if fully and properly elaborated, would constitute prima facie justification of the conclusion of insanity.

A few typical physicians' certificates taken at random from cases committed to the Kalamazoo State Hospital are set forth in full as follows:

*Exhibit 1.*—"Wanders about the house. Confused. Unable to take care of his personal needs. Delusions and hallucinations."

*Exhibit 2.*—"Mentally confused, restless. Diagnosis: Senile psychosis."

*Exhibit 3.*—"Senile psychosis. Dementia praecox. Shut-in personality. Leaves the home and travels about the country."

Note. Each of the three certificates cited above is based purely on conclusion. The word "confused" is a conclusion and does not describe how the patient acts or what she does. Delusions and hallucinations are conclusions and are not acceptable. The physician should describe the delusions and the hallucinations; he should give facts to prove that hallucinations or delusions actually exist.

*Exhibit 4.*—"This patient is forty-one years old and presently confined at Eloise. He was picked up by the police upon complaint that he was acting queerly. Examination reveals that he is disoriented as to time and place. He is confused. He did not appear to suffer from delusions. I recommend that he remain at Eloise for observation and treatment."

Note: In one of the writs of habeas corpus the circuit judge ruled that the above certificate was inadequate because it was based upon hearsay and conclusions made by the physician. The facts, if any, given by the physician were insufficient.



*Exhibit 5.*—"Patient is thirty-eight years of age. He has never been able to take care of himself without aid from his parents, particularly his mother. Has not been able to hold a job for any length of time. Previous history of having been under treatment at the U. of M. Hospital and Kalamazoo State Hospital in 1930. Present mental upset precipitated by an unfortunate marriage in which he was sexually impotent. Marriage ended with divorce ten months later. Diagnosis: Inadequate personality. Anxiety neurosis. Mother fixation complex."

Note: The above certificate is based largely upon circumstances. The physician gives some facts but they are not sufficient. The physician in this case was very careful to give a complex diagnosis, which means nothing to the court. The court wants a compilation of the symptoms upon which the diagnosis is based.

It is clear from the foregoing examples that even qualified physicians find difficulty in stating the facts and circumstances upon which they base their opinions that certain persons are insane. Probably it would be impossible for any examining physician to set forth fully in a written certificate all the facts and circumstances which contribute to his conclusion, because many of them would consist of subtle features of bizarre behavior which cannot be fully described.

The common mistake made in all of the above certificates is the fact that the physician has given conclusions rather than facts and circumstances upon which his diagnosis is made.

The certificate given below should serve as a fair outline for procedure in making out a physician's certificate of insanity.

"Today my examination shows that he has delusions, in that he is of the opinion that the police and the people of the town are working against him. His claims are not true, because I have made personal investigations and I am sure that the people of the town and the police have been more than tolerant toward him for many months.

"Today he tells me that he meets 'certain elements of people' on the street and when they look at him in an accusing way he reprimands them publicly in a loud voice in order to attract the attention of passersby. He said he wanted the people on the street to see how he is being persecuted. He talks a great deal about the 'certain element of people,' but he is unable to make his meaning clear.

"He goes on to explain how certain restaurants have put poison in his food, not for the purpose of killing him, but for some other reason which he cannot explain to me. He says he knows the food was poisoned because it tasted bitter and made his head 'swim.' He tells me about an altercation which he recently had with a waitress in a restaurant. This occurred on March

11, 1948. According to his statement, he sat down at the counter in the restaurant, ordered a meal, and two men came in and sat down beside him. He struck up a conversation with them. The waitress came and stood in front of him and began to make faces at him, ridiculing him, without saying a word. He claimed that this waitress was refuting the things he was trying to tell the men who sat beside him. He states he reprimanded the waitress for the way she acted. He admits he talked loudly in the restaurant, and he states that, curiously enough, the manager of the restaurant came in and sat down to listen to him, for what reason he does not know. He thinks the manager was there to spy on him. He states he left the restaurant and went out onto the street. He told passersby about his experience in the restaurant. The police appeared on the scene and took him to jail.

"I think this man is definitely insane and I recommend that he be committed to the Kalamazoo State Hospital. He is a litigious-minded person, and I recommend that he appear in court on the day of his hearing."

The adjudication of a person as insane is a very serious matter. No physician should be a part of such procedure unless he fully understands what is expected of him under the statutes of the State of Michigan. Patients committed to state hospitals frequently appear to have no knowledge of having been examined by physicians prior to their commitment as insane persons.

Some patients tell us that their family physician and another man called upon them in their home, or in some place of detention, prior to their being brought to the state hospital, but they were not given an examination. In most instances the examinations made by the committing physicians have not been impressive, at least to the patient himself.

We physicians should strive to comply with the present law, with the hope that it will be changed to meet present social conditions. It must be remembered that alleged insane persons should not be deprived of their constitutional rights. All alleged insane persons should have the right to be present at their hearings, unless it should be made to appear to the court by the certificates of two reputable physicians that the patient's condition is such as to render his removal to court for that purpose, or his appearing at such hearing, improper and unsafe.

### Summary

1. Physicians' certificates of insanity should give full descriptive detail with regard to acts, behavior and conversation of the patient. These facts or

(Continued on Page 606)

# Ovarian Pregnancy

By Manson G. Fee, M.D., and  
Jack W. Thompson, M.D.

Flint, Michigan



M. G. FEE, M.D.



J. W. THOMPSON, M.D.

**P**PRIMARY OVARIAN pregnancy is the result of fecundation of the ovum while the latter is still maintained in the graafian follicle. It is thought that a peri-oophoritis is present, and the tissue is resistant to rupture. Follicular cysts are then formed. Impregnation of a graafian follicle then occurs. In such cases, the corpus luteum is rarely perfectly formed; early hemorrhages occur, the trophoblast penetrating the layer of lutein cells. Chorionic villi become attached to the ovum, and often the distal ends enter blood spaces in the ovarian stroma. Placentation is probably the same as in an intra-uterine pregnancy, except that in the latter there is more blood supply and a more complete attachment of the placenta. Most likely a pseudodecidua occurs which is an expression of reaction of ovarian tissue to irritation produced by the erosive action of the trophoblast.

Spiegelberg in 1878 gave the four following criteria for a true ovarian pregnancy:

1. The tube on the affected side is intact.
2. The fetal sac occupies the position of the ovary.
3. The sac is connected with the uterus by the utero-ovarian ligament.
4. Definite ovarian tissue is found in the sac wall.

Williams added that he believed several portions of the sac wall should contain ovarian tissue. Smiley and Kushner<sup>9</sup> believe that endometrium, i.e., endometriosis or implants in the ovary, is

necessary for true ovarian pregnancy to occur. There is no need for an embryo to be present as a qualifying point in an ovarian pregnancy, as most cases rupture spontaneously and the fetus is not found in the blood clots. If surgery is performed late, i.e., several days or weeks after rupture, involutionary changes in the sac wall may obliterate the ovarian origin of the pregnancy. It is probable that ovarian pregnancy is not as uncommon as stated. An ovarian hematoma, when carefully examined, may reveal a pregnancy.

Until 1921, reports by Norris, Lockyer, and Wynne and Meyer indicated approximately forty-two cases of true ovarian pregnancy.<sup>8</sup> Thomas<sup>11</sup> reviewed the literature, and compiled sixty-five cases up to November, 1941. We were able to find approximately ten additional cases<sup>1,3,4-7,9,10</sup> through 1947. Stamm<sup>10</sup> reports that there are approximately eighty-five authenticated cases of primary ovarian pregnancy.

The duration of an ovarian pregnancy is generally longer than a tubal pregnancy. The tissue is more elastic and resilient; the substance of the ovary is thicker. Rupture usually occurs because (1) the syncytium invades the blood vessels and causes intracapsular or extracapsular bleeding, or (2) the sac becomes thin and is no longer able to resist the increasing pressure of the growing ovum. Thus, the termination of an ovarian pregnancy is by (1) rupture into the peritoneal cavity with hemorrhage and death of the fetus, (2) rupture of the sac with secondary ovario-abdominal pregnancy (placenta remains attached to ovarian parenchyma), or (3) rupture with secondary attachment of the ovum, thus producing an abdominal pregnancy secondary to the primary ovarian gestation.

This case report, we believe, fulfills the criteria for a true ovarian pregnancy.

## Case Report

Mrs. K.C., a thirty-one-year-old white woman, entered the hospital on January 14, 1948, with the complaint of vaginal bleeding for the past four weeks. She had been perfectly well until the first part of December, 1947. During the past month she had experienced cold sweats, intermittent cramping lower abdominal pains, and irregular vaginal bleeding. The symptoms had gradually increased in severity. Vomiting had occurred only once. The patient occasionally fainted after her spells of abdominal pain and sweating. She had no complaints referable to the chest, genitourinary system, or the gastrointestinal tract. Her menstrual history was

From the Department of Obstetrics and Gynecology, Hurley Hospital, Flint, Michigan.



irregular, the last "regular" period being September 15, 1947. She had no bleeding until November 12, 1947, at which time she flowed for two days only. She then had vaginal bleeding again on December 13, 1947, and continued to bleed intermittently after that date. During the first part of the past month, she had severe bleeding whenever she walked. During the latter portion of the month the patient used five to six vaginal pads daily, which became soiled but not soaked. The patient had had a whitish vaginal discharge for the past four-five months. Upon admittance the patient was assumed to be gravida iii para ii (now known to be gravida iv). Her first pregnancy was uneventful, resulting in a three to four-hour labor and a full-term living child. Her second pregnancy resulted in a miscarriage at five and one-half months, cause unknown. The third pregnancy was somewhat unusual, in that she experienced nausea and vomiting at five months' gestation, and had false labor at seven months. She finally delivered a full-term living child after a short 1½-hour labor.

Physical examination upon admittance revealed a well-developed, well-nourished, white woman in no apparent pain. Blood pressure was 120/70; pulse was firm and full, the rate 80 per minute. Temperature was 99.4°. Examination of the chest revealed no abnormalities. Breasts were normal. The abdomen revealed an old, well-healed, surgical scar in the right lower quadrant. There was tenderness to deep palpation in the right lower quadrant and to superficial palpation in the left lower quadrant. Rebound tenderness was present moderately in both lower quadrants. The impression was that the patient had much more tenderness in the left lower quadrant. Pelvic examination revealed the uterus to be anterior and of normal size, shape, and consistency. Tenderness was most pronounced on movement of the cervix. The right adnexa seemed prolapsed and thickened, while the left seemed to present a tender mass encroaching the cul-de-sac. There was no definite bulging. A slight bloody discharge was present but no active bleeding from the cervix. At this time, the impression was that of ectopic pregnancy, subacute pelvic inflammatory disease, or ovarian cyst.

All laboratory tests were essentially normal, and on January 17, 1948, a Friedman test was reported as positive. The following day the patient had an episode of acute abdominal pain. Re-examination gave essentially the same results as obtained originally. On January 19, 1948, an exploratory laparotomy was performed. Findings at operation were:

"The uterus appeared to be pulled backward toward the cul-de-sac by adhesions. It seemed fairly normal in size, shape, and consistency. The adnexa were both prolapsed and adherent in the cul-de-sac to a large, soft necrotic mass of tissue occupying the entire posterior cul-de-sac. This mass of tissue was intimately connected to the right ovary, and the left adnexa were easily freed from this mass, and the tube and ovary on the left side appeared essentially normal. There was no evidence of recent abortion from the tube, and the lumen was tested and found to be entirely free and patent throughout. The mass was dissected free from the cul-de-sac

and elevated along with the right adnexa. The right ovary appeared to be exploded in about the middle, with just a shell remaining. The right ovary was removed by clamping the pedicle, replaced with suture ligatures. The right tube appeared normal. There was no evidence of recent disease or abortion. The fimbria appeared normal, and the lumen was tested and found to be entirely free and patent throughout. The cul-de-sac was cleaned of all necrotic debris, and the uterus suspended after the technique of Gilliam. The abdomen was wiped clean and the wall closed in its anatomical layers."

The pathological report was as follows:

"Gross.—Specimen consists of 16 grams of fragmented, soft, friable, pale chocolate-colored substance, resembling an old blood clot and containing a corpus luteum follicle and several blackish colored recent blood clots. Also present is a markedly fibrotic ovary measuring 3.5 by 2.5 by 2 cm., corpus luteum follicles, and a small hemorrhagic cyst.

Microscopic.—Ovary showing either involutonal or compression atrophy. Multiple follicular cysts, subinvolutated corpus luteum follicle plastered with blood. No decidual reaction seen attached to ovary. However, there is a separate mass with ovarian fragments showing a typical extrauterine pregnancy with trophoblastic decidua in contact with the ovary. We see one surviving chorionic stem. Since careful examination of both oviducts during surgery revealed no evidence of tubal pregnancy, diagnosis must remain extrauterine pregnancy, ovarian type."

The postoperative course was uneventful, and the patient was discharged ambulatory on the ninth postoperative day.

## Conclusion

We have attempted to review the literature and summarize the knowledge concerning primary ovarian pregnancy. Our case report fulfills, we believe, the criteria for a true ovarian pregnancy.

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Roentgenologically the most valuable difference between Ewing's sarcoma and osteomyelitis is sequestration, which occurs in osteomyelitis but not in Ewing's sarcoma.

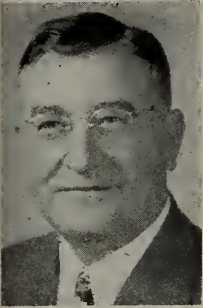
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Irradiation has little value in the treatment of osteogenic sarcomas because, with exception of Ewing's tumor, they are as a rule radioresistant.

# The Anxiety State from the Layman's Viewpoint

By Robert C. Moehlig, M.D.

Detroit, Michigan



**B**ECAUSE THE individual suffering from an anxiety state often would like to know how others having the same condition feel, and since common suffering from a nervous ailment produces a fraternal feeling of comfort, the symptomatology of this condition is given. This article is written

for the layman and with the hope that the physician may let the patient know his condition is understood and thereby provide a sympathetic bond between patient and physician. Furthermore, this may save the physician's time.

Every physician is in a minor sense a psychiatrist, and the longer he has been in practice, the more he understands disease and its effect on the mind. There is no condition in medicine that is characterized by the constant thought concerning oneself as anxiety neurosis. This is the predominant waking thought.

If this article is read by and is interesting enough to the neurotic person, he will read the contents several times, for all reading is difficult, his mind wanders and the lines blurr. Furthermore, the eye muscles tire quickly and so reading is a great task.

Just why does an individual develop an anxiety neurosis? It can be stated that he has a nervous system which is supersensitive and reacts to stress and strain with greater intensity than the average individual, and this leads to mental exhaustion if the underlying condition continues long enough. Both brain and body become exceedingly tired. Why should there be these differences between a neurotic individual and a normal one?

Most neurotics are the offspring of nervous parents, that is, the constitutional-genetic factors play the major role in predisposing the individual to an anxiety state, and in a more marked condition it leads to hysteria.

Often either parent or both have a goiter, and

because the thyroid gland influences the development and function of the nervous system, the goiter toxin produces a condition of nervousness in the parent which is transmitted to the children.

In Michigan, which is in the so-called goiter belt and where goiter is endemic it has been my experience that the greatest predisposing factor in the parents has been the presence of a goiter in either or both parents. This does not mean, however, that all neurotics have parents with a goiter, for a nervous make-up or temperament in a parent without a goiter also predisposes the individual to an anxiety state. Alcoholism in the parent is another factor predisposing to this condition. As everyone knows, individuals react differently to mental stress and strain, and what affects one is dismissed lightly by another.

Anxiety neurosis is, as the name implies, characterized by anxiety, worry and fear. If the mental strain which the predisposed individual is under exists long enough, his nervous system, and specifically his brain, becomes tired out, exhausted, and this sets off the train of anxiety symptoms. Just what are the causes of mental strain? They are almost innumerable. In a general way it can be said that there are three important factors which precipitate the anxiety state.

*First* are domestic factors, and it is self-evident that these are of many varieties. Mental incompatibility is often present; differences in education between husband and wife, leading to differences in interest, result in living under a constant mental strain. Continued long enough, it leads to the partners living a separate life, and finally if the soil in the nervous system is favorable, in either one or both partners, an anxiety neurosis develops.

The recognition of mental incompatibility may lead to frustration; a feeling of hopelessness pervades the mind, and if divorce is out of the question, the conscious and subconscious mind is continually harrassed by disturbing thoughts.

*Second*, financial worries, as were so prevalent during the great depression of recent years, play a large role in the production of an anxiety state. The fact that an individual who is the support of a family feels that no matter what happens, he must continue his occupation, leads to an anxiety state—fear that he can no longer carry on, and thus lose what financial security he has, continually worries him. An individual who has been successful, has worked hard to gain his finan-



cial success, and then suddenly loses it, is often thrown into a panic and a state of insecurity.

During the present period of prosperity, this second factor has been met with less frequently.

*Third*, sexual causes are many and varied. Frustrations, imposed by conscience, religion and society, may precipitate a neurosis in certain individuals. Masturbation with a deep sense of guilt is another frequent cause. Sexual perversions or a continual conflict to overcome such a condition may furnish the background. The causes of a sexual nature are so numerous and so varied, and have been discussed in a most voluminous literature, that it would serve no purpose to detail even a few of the examples. Needless to say, the psychiatrist delves into this and other phases of neurotic etiology with great thoroughness.

Anything which continually stimulates the brain may produce an anxiety neurosis. Any disease which produces overactivity of the brain and psychic centers may set off the mechanism in a predisposed individual. As an example, a toxic goiter may initiate the condition, and practically all individuals who have this disease are made neurotic by it; some more so than others. Furthermore, any infectious disease which causes fever may set the mechanism in motion and induce a neurosis. In case of toxic goiter, the constant bombardment of the brain by the goiter poison, which raises the metabolism or the building up and breaking down processes of the body, results in mental exhaustion. There is great similarity between the symptoms of toxic goiter and anxiety neurosis. Both toxic goiter and anxiety neurosis usually produce a rapid heart action, extreme nervousness, excessive perspiration, excitability, irritability, mental depression, insomnia, weight loss, crying spells, dizziness or vertigo, headaches, extreme fatigue, tremor of the tongue and extended fingers, variations in blood pressure, slight rise in temperature, menstrual irregularities in the female, spells of diarrhea, certain abdominal symptoms such as gas, sour eructations, difficulty in swallowing, and abdominal cramps, as well as other symptoms referable to the intestinal tract.

There are certain fundamental differences between the neurosis induced by a toxic goiter and the neurosis caused by an anxiety state. The first is due to the goiter toxin overstimulating the psychic and nervous centers, whereas in anxiety neurosis the trouble begins primarily in the psychic

centers. The anxiety neurosis induced by mental strain differs from that of toxic goiter in several ways. These are within the province of the physician, and he is usually able to differentiate the two. In the anxiety neurosis induced by mental strain, the excessive perspiration is usually confined to the axillary regions, whereas in toxic goiter it is generalized. Also, the former is usually associated with a poor appetite whereas the goiter patient usually has a good one.

Today with the use of radioactive iodine we are also able to differentiate the symptoms induced by the ingestion of thyroid substance and that produced by toxic goiter.

### Symptomatology

The symptoms of an anxiety state are numerous and varied. Given an individual having undue stress and strain over a period of time, with a sense of frustration and a sense of guilt, conscious or subconscious, the time will come in the predisposed nervous individual when his brain can no longer cope with the disturbing thoughts. His brain feels "chased." The onset frequently is sudden; the individual is able to remember the exact day and the circumstances when the symptoms began. Mental and physical fatigue usually precede the onset.

Suddenly, as if a bolt from the sky struck the individual, a terrified panicky feeling comes over him. The heart beats rapidly, a sense of lightheadedness is present, and a sense of impending death enters the picture. Breathing is rapid, the heart pounds forcibly against the chest wall, cold perspiration covers the forehead, and a look in the mirror reveals the pallor of the face and the dilated pupils. A sense of unreality enters the picture. By this time he cannot sit still, he must get up and do something—walk around—throw himself on the bed in a helpless panic. He would like to "pass out" to get away from the horrible feeling. He is afraid to be alone. In about fifteen to thirty minutes the acute panicky stage passes; the heart, while still beating rapidly, is doing so less forcibly, and gradually the individual is able to "get hold" of himself. He feels completely exhausted, and he senses that a great change has taken place. Everything is different—he is now in a different world.

From now on, the great conflict is present, with periodic attacks of apprehension and a sense of dissolution. The chronic anxiety state now manifests

itself. His mind is in a continual fog and daze. He remains terrified, he is worried and in a chronic state of apprehension. He goes to bed with a sense of unreality. Sleep is fitful and restless, and this becomes a chronic condition with insomnia. During the night involuntary thoughts keep racing through his mind. There is no brake on his thoughts—flitting from one to another in a rapid and illogical sequence. He becomes afraid to be alone at any time, and particularly at night during the darkness, fear grips his tired brain. What an existence! He wakes from the restless sleep—if he does sleep at all—feeling utterly exhausted. He dreads to face the approaching day. *Having reached the chronic anxiety state, he has no other thoughts except those concerning himself. Nothing else matters.* It is now a life of continual introspection: "What is wrong with me? I must have something seriously wrong." Every waking moment is concerned with his state of health, he feels so different—*so unreal!* Everything seems unreal—"different from what I felt when I was well." Life with its occupational duties is a terrific strain, trying to get through the arduous tasks in which interest is completely lost. Being completely taken up with thoughts concerning himself, he does the daily work more or less automatically. Some neurotics feel better doing their work and feel safer around people.

The mental state is a pitiful one. There is a continual effort being expended to cover up the change, so that friends, relatives and others will not detect it. He is constantly afraid that his condition may show itself in public, by his fainting or by showing his condition in some objective way. The memory becomes poor as a result of the mental exhaustion, and added to the already strained nervous system comes the great fear of losing one's mind—becoming insane. This also becomes an obsession. The changed feeling which the neurotic has toward the outside world, added to this fear of going insane, leads to the morbid thought of suicide. He feels that the situation is hopeless and gives much thought to suicide.

Neurotics have many fears or phobias. One of the most frequently encountered is the fear of closed places or claustrophobia. They become panicky in a closed room, in an elevator or closet. This fear of a closed room is dispelled if the door is opened.

Headaches, pounding of the head, coupled with the all-too frequent feeling of dizziness, leads to

the thought of a brain tumor or some other serious brain pathology. Reading is difficult for the neurotic. In the first place, his thoughts are always about himself; second, he is unable to concentrate his thoughts long enough to follow the train of thought presented in the reading matter. Also the eye muscles are tired, and soon after he begins reading, lines blurr, run together, and his thoughts drift from the printed page. And so he gives up in disgust.

He is continually seeking some physical explanation for his terrible mental state. He tries to analyze his condition and looks to the physician for help. A physical examination is undertaken with the result that he is told there is nothing organically wrong. All too often he is told to "stop worrying, there is nothing wrong." Of course this is superfluous advice which the neurotic is unable to follow. It requires much more than a curt dismissal with the "stop worrying" advice. I shall discuss this phase under "Treatment."

The neurotic is continually tired. He goes to bed tired, wakes up just as fatigued as when he went to bed. He feels better in the evening than during the day. He approaches a nearer normal state in the evening than at any other time. He usually does not get the mental exhilaration alcohol accords the average normal individual, and there are some neurotics who do escape from the anxiety state after a few cocktails or highballs. If so, it is a dangerous escape, for it is easy to acquire the cocktail habit since it "knits up the raveled sleeve of care." Other neurotics find no solace in drink, feeling worse the next day with increasing dizziness and mental confusion.

Sometimes the neurotic is afraid to cross a street unless he is with someone, even the slightest touch from the companion being sufficient to instill confidence in crossing. Likewise he feels as though he does not get enough air into his lungs, and this leads to sighing respirations.

Phobias or fears take on various forms. The fear of some serious organic disease, as mentioned before, often remains an obsession. Fear of cancer, syphilis, apoplexy, heart disease and numerous others becomes a constantly recurring and disturbing thought. When visiting a physician, neurotics frequently bring with them a list of complaints, for fear that they will forget to enumerate all. This is due to the fact that their memory is poor, and because there are so many symptoms, they are afraid some will be forgotten. This



bringing of a list of symptoms had led the French physicians to term the condition, "the malady of little papers."

It is quite natural after several weeks of the constant anxiety for the individual to be depressed, reaching the depths of despair the longer his anxiety state goes on. This depressed mood becomes noticeable to those with whom he is in daily contact, so much so that they express themselves in this regard. Since the neurotic is so introspective and fearful, this expression of change by his friends adds to his worries and convinces him that there is something radically wrong. The fact that the nervous state may produce anorexia or loss of appetite, which in turn leads to weight loss, is further fuel to the fire of anxiety neurosis, so that the thought of organic disease becomes fixed.

The neurotic individual presents in some ways certain paradoxes. For instance, he dislikes and fears to be alone, desiring the presence of some one he knows. However, he would much rather that the companion be a silent one, so that the neurotic can remain engrossed in thoughts concerning himself. He dreads being alone in his home, always fearful that something may happen to him. Noises bother him—the jangling of the telephone bell, children's voices and noise in general are disturbing.

After a certain length of time, which varies with each individual, the neurotic reaches the chronic stage of the condition. While the spells of apprehension with the sense of impending disaster or death recur often, he gradually learns to discount the acute phase, for he has experienced this so often that finally his brain is convinced that he will not die during the attack. However, the unpleasant sensations always remain with him. Should he be in a theater or church for instance, he will take by preference the seat next to the aisle, where he may leave instantly should the panicky feeling come over him. He grips the sides of the seat, breathes rapidly, feels his heart racing; his thoughts become confused, his brain races, and he feels faint. He feels that he must get out of the place he is in. He continually worries that his condition is noticeable to others, and he attempts to "cover up."

The chronic neurotic has a sense of inferiority since his memory is poor and he can no longer carry out his ambitions. He is too tired to attempt anything constructive because his brain is tired and

he feels exhausted. Some make "superhuman" efforts to succeed in their work and find an outlet in this, and at times are able to overcome their neurosis.

But the continual racing of the brain, without being able to put the brakes on the involuntary thoughts, leads to despondency, great unhappiness and a sense of helplessness, so that the neurotic turns to anything or anybody who can help solve his problem. He not infrequently feels as if there were a band around his forehead, and he has a sensitive scalp. The various chest pains convince him that he has heart trouble, and all the more so when the heart races. The many and varied symptoms confuse the neurotic, and he gropes for an explanation, each day looking for something new to explain his symptoms. It is because he is continually seeking for an explanation of his troubles that he attempts an analysis of every presenting symptom, so much so, as stated previously, that he transfers these in writing and relates each one to the physician. Frequently the recitation of the symptoms to an understanding physician does for a time relieve his mind. Psychiatrists term this a "mental catharsis." However, unless the racing thoughts through his brain are slowed down, the brain remains exhausted and thinking is not logical. The neurotic feels so helpless, so depressed, and believes there is no hope for his miserable mental torture. The sense of unreality deepens, and he continues in his mental fog. A continual and sustained state of anxiety, fear and worry make up his daily routine, never leaving him during his waking moments, and as if this were not enough for his tortured and tired brain, his sleep is disturbed by wild and fantastic dreams. Naturally, mental and physical exhaustion are the result, so that he can hardly carry on his duties. He finds no escape from his anxiety state. There is no pleasure in anything, and his interest in other things, such as sports, entertainment, companionship of others, is practically nil. Some neurotics are moody, irritable, sullen and depressed, whereas others put on a false "front" with smiles (usually forced) and tell humorous stories or jokes, but this is, of course, an operative curtain hiding the stage of neurosis.

This array of symptoms can be added to by any neurotic individual, but these are the basic ones and the variations of them are innumerable. Some are emphasized more than others, and their intensity varies with the individual.

### Treatment

The neurotic probably agrees, in the main, with the clinical picture I have presented, but his greatest and only interest is "what are you going to do about it?" or "What shall I do to cure myself? I have tried and tried to pull myself up by the bootstraps but I still have all my symptoms, and while I have learned to discount the panicky feeling of impending dissolution my chronic symptoms of fear, anxiety and worry never leave me." *Let me say as emphatically as I can that he can be cured.* It is characteristic of the neurotic to say with his worrying mind, "Yes, but will I stay cured?" We will come to that later.

The advice I would give to every neurotic is to place himself in the hands of an understanding physician—one with a sympathetic and congenial disposition—and naturally one with an optimistic outlook, in other words, "no sour-puss." Of course, the neurotic will say, "Where can I find one like that?" Most regular physicians who belong to their county, state and national societies are qualified to treat the various ills of mankind, but not everyone is qualified to treat neurosis. Some are not of the temperament that lends itself to an understanding of the condition; others have not the time that a neurotic requires, for he immediately senses a "brush-off" if he cannot relate his various symptoms. Once the physician has the neurotic's confidence, the latter is on the way to recovery. Furthermore, once he is convinced that he has no serious organic trouble or pathologic condition such as heart trouble, brain tumor, or the various ills that flesh is heir to, then he is taking his first steps which lead him out of his Stygian darkness. These two basic principles, confidence and implicit faith in his physician and a resolute conviction that he has no serious organic disease, are prime necessities in the steps to recovery. Once these two principles are brought about, the road back is easier to find. He must unburden his soul to the physician.

The details of how to slow the racing brain of the neurotic must be left to the physician. He may and frequently uses some form of sedation so that a brake is placed on the speeding brain, which acts like a merry-go-round of illogical thoughts. The brain requires rest so that the neurotic can collect his thoughts and steer them into logical channels. He learns to discount the irrelevant thoughts and is able to "pigeon-hole"

his ideas and once more call on each in a logical and orderly sequence. That there is some organic change which takes place in the brain cells when the thought processes are slowed up seems most likely. There is probably a change in the cell chemistry which brings about an organic change in the exhausted brain cell. Of course, the afflicted individual cares little how it is accomplished, just so that it is. It can be readily understood that self medication in a condition of this kind leads to trouble, for the neurotic will try every suggested remedy that is held out to him. That is one reason why so many drugs are restricted to physicians' prescriptions.

It is of interest that the anxiety state may end as suddenly as it began. The person may wake up some morning and realize that he feels like he did before the onset of his illness. What a strange and euphoric feeling of ecstasy!! Surely a surcease from sorrow—the realization that the brain no longer is racing; a calmness pervades the mind, a feeling of serenity, and a sense of peace comes over the individual.

There are many who may say that, being a physician, I am attempting to sell my profession to the public. Let me say that I certainly am sold on my own profession, and the vast majority of its members are honest and conscientious. Some there are, of course, who are not qualified to undertake the treatment of anxiety neurosis. Some are too busy to give the time necessary for a sympathetic understanding and time-consuming treatment. This leads to further discouragement and pushes the neurotic into greater depths of despair.

This brings up the important question, "Shall I consult a psychiatrist?" The psychiatrist who has had the basic training, and has the respect of not only his fellow-psychiatrists but also his general practitioner and specialty brethren, is eminently qualified to treat the neurotic. No one can treat the wretched soul as well as the psychiatrist—but this has one important qualification—provided he has his "feet on the ground."

Because so much time is necessary to reach the bottom of the neurosis, it is apparent that psychiatry may be expensive. Naturally the psychiatrist can treat only a limited number of individuals in a given time, and he therefore asks a fee commensurate with the time spent as well as for his specialty training.



Treatment may well be a matter of personal equation; a good general practitioner of great experience, an internist, or any understanding physician may do just as well as a psychiatrist. Exception may be taken to these remarks, but my experience permits me to make such a statement. In saying this, I am not referring to myself but to my colleagues. The success of the older practitioner with neurotics was based on his deep understanding of human nature and his ability to give sound advice and a sympathetic ear. Also that hand on the shoulder helps much like James Whitcomb Riley's poem:

"It's a great thing, O my brethren, for a feller just to lay  
His hand upon your shoulder in a friendly sort o' way.  
Oh, the world's a curious compound, with its honey  
and its gall,  
With its cares and bitter crosses, but a good world, after  
all,  
An' a good God must have made it—leastways, that is  
what I say,  
When a hand is on my shoulder in a friendly sort o'  
way."

What should be emphasized is that once the brain no longer races, then the individual is again able to rationalize and think clearly and logically. The psychiatric treatment given as stated above by an understanding physician, aided by some form of drug therapy which assists in applying the brakes to the racing brain, and perhaps by some hypnotic judiciously prescribed in limited amounts so as to "knit the ravelled sleeve of care," finally permits the neurotic to shake loose the chains of neurosis which have held him in its clutches of despair, depression and Dantean inferno.

That there are times when a return of symptoms takes place is true, but once having had the experience and satisfaction of recovery, the neurotic finds it easier to overcome the anxiety state. He has greater courage to face the anxiety state. He learns that since he still continues to live despite the many symptoms, the disease is not a fatal one, albeit one that produces a miserable existence.

The recognition that there is hope for a cure, that he will not become insane, that there is no serious organic disease or pathology should spur the individual on to a successful conclusion and end to his neurosis.

I am thoroughly convinced that an anxiety neurosis, no matter what the cause, has certain chem-

ical changes in the nerve cells of the brain. What these chemical changes are we do not as yet know, but the fact that a toxic condition, such as a goiter or the taking of thyroid substance, produces an anxiety state leads to the supposition that cellular chemical changes have taken place. The fact that removal of the toxic goiter or discontinuance of the drug leads to a return to normalcy lends support to the cellular chemical change as a cause of the anxiety neurosis. A constant mental strain does, I believe, cause a similar chemical change in the nerve cells of the brain such as is produced by a goiter or stimulating drug, which leads to the exhaustion state.

In conclusion, let me re-emphasize, as strongly as the printed word can do so, that the outlook for the anxiety neurotic is good, and with our better understanding of the various causes, the prognosis becomes better. Some day when we have placed our fingers on the offending chemical changes in the brain, we will be able to neutralize and counteract these chemical changes and restore the neurotic to complete mental health. So let the neurotic take fresh courage, for the path back can be found with the help of an understanding physician.

964 Fisher Building

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## PR IN PRACTICE

### From the Mailbag

(Continued from Page 550)

to have 100 copies for distribution to officers and members of key committees of our Association.

\* \* \*

*Hawaii Medical and Dental Associations:* Drs. Pinkerton and Arnold on their return from Chicago have been discussing the CAP plan and its merits, and Dr. Arnold particularly believes that it would be well to consider implementing it here in the Territory. . . . The machinery of the CAP plan could be very helpful . . . as well as for the broader public relations program . . . and we would like to prepare more of the physicians for leadership. We believe if they can see where it doesn't have to fall to just a few to carry all the burden, we will get more of them to put a shoulder to the wheel.

\* \* \*

*Mrs. Stolz, Secretary, Woman's Auxillary, Pennsylvania:* At the request of Mrs. Craig, I am writing to congratulate you on your CAP plan. We regret that ours is not as carefully organized. . . . Again we salute you for your superior work.

# Bronchiectasis

## Report of 100 Cases

By Nathan Levitt, M.D., C.M.

Detroit, Michigan



THE OBJECT of this paper is to present a series of 100 cases of bronchiectasis admitted to Harper Hospital from 1945 to 1947, inclusive.

Although bronchiectasis was originally described by Laennec in 1819, little progress was made in the diagnosis of this disease until the discovery of

the x-rays by Roentgen, which marked quite an advance in our knowledge of the diseases of the chest.

However, with the introduction of lipiodol by Sicard and Forestier<sup>23</sup> in 1922, a method for the visualization of the bronchial tree provided the greatest advance in the clinical diagnosis of this disease.

### Incidence

Most authorities agree that bronchiectasis ranks second to pulmonary tuberculosis among the chronic lung diseases.

According to Clagett,<sup>4</sup> bronchiectasis occurs more frequently and is more serious than is generally appreciated. Some degree of this condition is found in about 2 per cent of all cases in which necropsy is performed. Hamman<sup>10</sup> states that post-mortem statistics indicate bronchiectasis is found in about 1.5 per cent of routine autopsies.

The real incidence of this disease is very difficult to appraise because many patients suffering from bronchiectasis never consult a physician, and many more patients are misdiagnosed as chronic bronchitis, abscess of the lung or pulmonary tuberculosis. In our series of 100 cases, three patients were treated for pulmonary tuberculosis in various sanatoria for periods of time ranging from six months to two years.

### Etiology and Pathogenesis

Many writers and investigators have brought forward many theories regarding the etiology and

pathogenesis of bronchiectasis. Some stressed the congenital nature of the disease, but most investigators believe that the majority of cases are of the acquired type.

Riggins<sup>20</sup> states, "In a large number of cases studied at Bellevue and Lenox Hospitals during the past twenty years, no definitely proved case of congenital bronchiectasis has been seen by the writer."

### Acquired Bronchiectasis

It is felt by many men that by far the most important cases are those of the acquired type. Briefly, the major factors involved in the pathogenesis of bronchiectasis are bronchial infection, plus obstruction, plus atelectasis, resulting in bronchiectasis. It is a well-established fact that infections of the respiratory system play an important role in the establishment of bronchiectasis. Observers have found that measles, whooping cough and bronchopneumonia were the predominant factors in their cases.

Raia<sup>19</sup> reported that pneumonia and diseases which predispose to pneumonia accounted for the development of bronchiectasis in 73 per cent of the cases. Warner,<sup>24</sup> in a series of 110 cases of bronchiectasis followed for a period of time up to eight years, found that bronchiectasis began with a known illness in 59 per cent of his patients, pneumonia in 36 per cent (of which 30 per cent were primary and 6 per cent followed measles and pertussis), lung abscess in 12 per cent, whooping cough in 4 per cent, acute bronchitis in 2 per cent, bronchiogenic carcinoma in 2 per cent and foreign body in 1 per cent.

In 41 per cent of the cases the onset was insidious, there being no history of any acute respiratory infection immediately preceding the onset of bronchiectasis.

In our series of 100 cases of bronchiectasis the disease began with a known illness in 57 per cent of the cases, pneumonia in 35 per cent, upper respiratory infections in 15 per cent, influenza in 4 per cent, whooping cough in 2 per cent and abscess of the lung in 1 per cent.

It seems to be the consensus of opinion that pneumonia, especially bronchopneumonia, is the most common precipitating disease in the production of bronchiectasis. Other causes such as influenza, lung abscess, as well as the aspiration of foreign bodies into the bronchial tree, must also

From the Department of Internal Medicine, Harper Hospital, Detroit, Michigan.



be kept in mind. The presence of bronchiectasis distal to long-standing bronchial obstruction, as caused by the presence of an aneurysm, enlarged mediastinal glands, as well as tumors of the lung, must always be thought of.

The relationship of sinusitis to bronchiectasis has been observed by many writers. To mention just a few, there are Ochsner,<sup>17</sup> Perry and King,<sup>18</sup> Bloch and Francis<sup>1</sup> and Leopold.<sup>14</sup> Some claim sinusitis to be the primary cause of bronchiectasis, while others feel that sinusitis is secondary to bronchiectasis. This problem is very well summarized by Lisa and Rosenblatt<sup>15</sup> who state, "Although there is overwhelming evidence of the high incidence of sinusitis in cases of bronchiectatic disease, there is really no proof that sinusitis can cause bronchiectasis, either directly or indirectly."

In a series of seventy-five patients with bronchiectasis reported by Laird,<sup>13</sup> a routine examination of the upper respiratory passages and sinuses was made in each case by the otolaryngologist. Commenting on these findings, Laird says, "It was a distinct surprise to note that the examination was negative in practically every case."

In our series of 100 cases of bronchiectasis there were nine cases of co-existing sinusitis.

### Atypical or Virus Pneumonia and Bronchiectasis

Recently the relationship of atypical pneumonia to bronchiectasis has been the subject of many papers. Kay,<sup>12</sup> Grier,<sup>9</sup> Laird<sup>13</sup> and others.

To understand this relationship it is advisable to review the pathological aspects of atypical pneumonia. One of the most comprehensive articles on the pathological anatomy of atypical or virus pneumonia has been written by Major Alfred Golden,<sup>7</sup> who studied a series of forty cases from the years 1940-1944.

According to Golden, the pathological findings in atypical pneumonia are described as follows:

"The acute dilatation of affected bronchioles is observed fairly constantly. One would expect that complications might ensue, such as chronic bronchiectasis. To date, no case in which this occurred has come to my attention pathologically. On the other hand, actual necrosis of bronchial walls was seen but once. In the remainder of the cases the lesions were of two types. In lesions of one type the bronchial walls were merely edematous, congested and heavily infiltrated with round cells. It is perfectly consistent with the known processes of repair that such lesions could resolve without leaving any appreciable damage. In lesions of the other type, frequently seen in the same case, one could demonstrate

in small bronchi and bronchioles marked dilatation, destruction of the elastic fibers, fragmentation of the muscle bundles and shredding of the reticular meshwork. Such lesions probably could heal only by persistent dilatation and scar formation. This is not meant to imply that all such lesions could or would ever become clinically manifest as chronic bronchiectasis."

Kay<sup>12</sup> reported a series of twenty cases with bronchiectasis following attacks of atypical pneumonia occurring during the winter of 1942-1943. In three of the twenty patients, the bronchiectasis appeared to be reversible, as confirmed by subsequent bronchograms. The remaining seventeen patients had more extensive bronchial destruction, and the damage appeared to be permanent. Prior to pneumonia these patients had no symptoms relative to the pulmonary system.

In seeking to show the relationship of atypical pneumonia and bronchiectasis, Kay argues that it has been shown that bronchial and bronchiolar infection and occlusion may occur in atypical pneumonia, and furthermore, that other authors have shown both clinically and experimentally that these two factors may produce bronchiectasis. He therefore concludes that when a number of patients have been seen in whom symptoms suggestive of bronchiectasis develop following a protracted course of atypical pneumonia, this cause-and-effect relationship should be considered.

Laird<sup>13</sup> also reported a group of seventy-five cases of bronchiectasis, from 1941-1945. Among this group there were nineteen patients who had no previous major respiratory infection, had one attack of pneumonia only since 1940, and had a persisting cough and sputum following this attack. Laird states, "It is suggested that this is a virus type of pneumonia. This is a very important group, as the history supports the hypothesis that bronchiectasis can and does develop as a relative acute disease, and is not one necessarily of many years' duration. Fifteen of these cases gave a history of six months or less before admission to the hospital and diagnosis of bronchiectasis."

Grier<sup>9</sup> reported a series of forty patients with bronchiectasis. He found that in this group 67.5 per cent had an initial misdiagnosis of atypical pneumonia, but on further study, including bronchography, the condition was found to be pneumonitis around a pre-existing bronchiectasis.

Grier draws our attention to the fact that in his study the differential diagnosis between primary

atypical pneumonia and pneumonitis around bronchiectasis is difficult at the onset. A history of chronic cough, especially following bronchopneumonia in childhood, hemoptysis, profuse sputum, or frequent colds in the chest makes one suspect bronchiectasis, although in some cases the past history may be entirely without such elements.

Bronchographic studies should be done in all cases of pneumonia which fail to resolve in a reasonable period (four to six weeks.)

### Clinical Signs, Symptoms and Diagnosis

The diagnosis of bronchiectasis must always be kept in mind when a patient complains of a chronic cough and expectoration. A good clinical history helps in the diagnosis of this disease. It is true that the advanced case of bronchiectasis will present the typical textbook picture of a patient suffering with a chronic cough and expectoration of copious foul-smelling sputum especially in the mornings, with recurring attacks of hemoptysis, loss of weight and shortness of breath, with clubbing of the fingers and toes. However, these signs and symptoms are not always present in the early or even moderately advanced case of bronchiectasis. The symptoms of bronchiectasis are usually present for a number of years before medical aid is sought. In our series of 100 cases (40 per cent dated the onset of their illness to the first decade of life. The other 60 per cent dated the onset of their illness from three months to fifteen years prior to admission to this hospital.

*Symptoms.*—In our series of 100 cases of bronchiectasis, the following symptoms were noted, in order of frequency: Cough was present in 95 per cent, and expectoration in 91 per cent—the amount of sputum varying from a few centimeters to several ounces in twenty-four hours. Hemoptysis was present in 25 per cent of our cases, ranging from blood-streaked sputum in some cases to severe hemorrhages in others. There were three cases of the so-called dry or silent bronchiectasis. These cases were characterized by pulmonary hemorrhages without any other symptoms. However, on bronchographic examination they were found to have dilated bronchii characteristic of bronchiectasis. These cases can easily be mistaken for tuberculosis, and a careful search for tubercle bacilli should always be made to exclude this disease.

Constitutional symptoms such as shortness of

breath, pains in the chest, loss of weight, recurrent attacks of pneumonia characterized by fever, chills and cough were present in 20 per cent of the cases.

*Physical Examination.*—The physical findings in the chests of our patients were not outstanding. The most common findings were limitation of motion of the affected side and persistent râles in the affected lung. In some cases there was diminished resonance with suppressed breath sounds in the involved areas. In about 15 per cent of our cases the physical chest findings were entirely negative. Clubbing of the fingers was present in only one case in our series.

*Roentgen Features.*—While the presence of bronchiectasis was suspected in the great majority of our cases by the routine chest x-ray, the confirmation of the presence of this disease was obtained by bronchographic studies. One must always keep in mind that a normal roentgenogram does not exclude bronchiectasis. It is only by the introduction of lipiodol into the bronchial tree that the presence of bronchiectasis can be confirmed. In a very fine article on the diagnosis of bronchiectasis, Evans and Galinsky<sup>6</sup> make the following observations: "Bronchiectasis is suspected more frequently from the routine roentgenogram than confirmation can be obtained by bronchography, and it is advisable to seek bronchographic confirmation of a diagnosis of bronchiectasis, however strong the suspicion for such a diagnosis may have been from the routine previous clinical roentgen studies." They further state, "The observation in serial roentgenograms of a slowly resolving basal bronchopneumonia, recurrent basal peribronchial infiltration, and a contracted segment of lung, either singly or in combination, warrants a suspicion of bronchiectasis."

According to Good,<sup>8</sup> "Bronchiectasis should be suspected whenever the roentgenogram of the chest gives evidence of a slowly resolving or recurrent bronchopneumonia in the base of one or both lungs. It should be suspected whenever atelectasis of a lobe or portion of a lobe exists."

*Bronchography.*—Bronchography is the only sure method of making a positive diagnosis of bronchiectasis. It gives us information as to the type and degree of bronchial dilatation.



*Bronchoscopy.*—Bronchoscopy is a very valuable aid in the diagnosis and treatment of bronchiectasis. Bronchoscopy is also of great value in the differential diagnosis of obstructive lesion in the bronchial tree, such as foreign bodies, tumors or a tuberculous granuloma. Most of our patients had at least one preliminary diagnostic bronchoscopic survey.

### Pathology

Bronchiectasis has been classified according to the shape assumed by the bronchial dilatations. The three most common types are described as the fusiform, saccular and cylindrical. Infected dilated bronchii constitute the basic pathological changes in bronchiectasis. Lisa and Rosenblatt<sup>15</sup> have given us a very fine description of the histopathology of chronic bronchiectasis:

"The pleura is densely adherent. The bronchii are dilated to varying degrees, and the walls are usually thickened due to fibrous tissue replacement. The epithelium is intact but may be considerably modified. The basement membrane is preserved. The muscle layer shows hypertrophy and moderate fibrous tissue replacement. The elastic fibers show thickening but are relatively unimpaired. Plasma cell infiltration of the bronchial wall is extensive, and lymphoid infiltration is moderate. The blood vessels in the region of the diseased bronchii are generally unaffected. The parenchyma shows marked interstitial fibrosis. The adjacent alveoli are normal or emphysematous. Gram-positive cocci are found in the bronchial wall and in the exudate."

The lobar distribution in our series of 100 cases of bronchiectasis was as follows: the left lower lobe was involved in thirty-five cases; in five instances the lingula was also affected; the right lower lobe was involved in twenty cases, and bilateral involvement was present in forty-five of our cases.

### Treatment

The treatment of bronchiectasis may be divided under two headings: the medical or palliative treatment and the surgical or curative treatment.

There are many cases which do not permit radical operation. This may be because of the age of the patient, advanced bilateral disease or the presence of complications. In these cases we may institute medical measures which will give them relief. It must be emphasized, however, that the pathological changes in the bronchopulmonary tissue have occurred and are permanent in na-

ture, and the most we can hope for in the medical treatment in these patients is to make them more comfortable by giving them symptomatic relief. Since the majority of the patients in our series were unfit for radical pulmonary surgery, a medical regime was carried out along these broad lines:

*Postural Drainage.*—By evacuating the bronchial secretions, the patients were made more comfortable; the cough was lessened in intensity, thereby promoting more rest.

*Bronchoscopic Drainage.*—Many of our cases were treated by this method. The congested mucosa was shrunk by the topical application of epinephrine hydrochloride, and aspiration of the bronchial secretions was instituted, giving the patients considerable relief.

*Drug Therapy.*—Aerosol penicillin was used quite extensively in most of our patients, causing a decrease in the amount of sputum and symptomatic improvement in a great majority of cases. Some patients received courses of the sulfonamides in conjunction with the above.

It should be emphasized again, however, that in most instances the medical treatment of bronchiectasis is unsatisfactory. According to Hinshaw<sup>11</sup> less than 10 per cent of patients receive gratifying results.

*Surgical Treatment.*—Due to the great advances in thoracic surgery, the mortality rate has steadily declined from 60 per cent in 1923 to about 3 per cent at the present time. Edwards,<sup>5</sup> in 1939, reported a series of 166 cases in which lobectomy was performed, with a mortality rate of 12 per cent. O'Brien<sup>16</sup> reported a series of fifteen lobectomies in 1937 with one death. Churchill<sup>3</sup> reported a mortality rate of 2.4 per cent in a series of 124 lobectomies. Laird,<sup>13</sup> recently reported one death in a series of eighty lobectomies performed in a group of seventy-five patients—a mortality rate of 1.25 per cent. In our series of 100 cases, due to the extensive involvement of the disease and other complications, only twelve lobectomies and one pneumonectomy were performed. Scarlett<sup>22</sup> states, "Cure of bronchiectasis can be secured only by total extirpation of the damaged portion of the lung, and there should be no hesitation in recommending operation."

In summarizing the treatment of bronchiectasis, I fully agree with Riggins,<sup>20</sup> who states, "The morbidity and mortality of untreated and medically treated bronchiectasis and suppurated pneumonitis is such that the physician who routinely advises young adults with operable bronchiectasis against surgery is assuming a great responsibility and in all probability renders his patient a great disservice."

### Prognosis

The lot of the average patient suffering with bronchiectasis is not a happy one. Many of our patients had to be readmitted to the hospital several times, either because of an exacerbation in their disease or for treatment of severe hemoptysis requiring blood transfusions.

Bradshaw, Putney and Clerf,<sup>2</sup> reported on a series of 171 patients with bronchiectasis admitted to the Jefferson Medical College Hospital between the years of 1925 and 1935. In the series, 34.5 per cent died of the disease or its complications, with an average duration of life from onset of symptoms of 13.5 years.

Riggins<sup>20</sup> reports that of a group of traced patients, 25 per cent have been able to do full-time work as a general rule, and 40 per cent have been able to do part-time work. The remaining 35 per cent were either unable to work at all because of the severity of their symptoms or had forsaken the idea of economic rehabilitation because of the psychological effects of the disease.

### Prophylaxis

It has been shown by many investigators that the specific infectious diseases of childhood, such as measles, influenza and whooping cough, predispose to the development of bronchopneumonia; and since this disease is recognized as the most common forerunner of bronchiectasis, it behooves us to try to prevent the development of bronchopneumonia as a complication. Rubin<sup>21</sup> states:

"It may be expected that the increasing use of immune globulin in the treatment of measles, of vaccines in whooping cough and influenza, as well as a wider application of sulfonamides and penicillin in the treatment of the acute pneumonias, will be reflected in the coming years in a material decrease in the incidence of bronchiectasis."

The prompt removal of foreign bodies, polyps and benign tumors from the bronchial tree, as well

as the prompt treatment of delayed resolution in both typical and atypical pneumonia, will in many cases prevent the development of bronchiectasis.

In cases of pulmonary atelectasis occurring after surgical operations, when thick tenacious secretions become impacted in the bronchii, bronchoscopic aspiration will prevent bronchiectasis in a great number of cases.

### Summary and Conclusion

A series of 100 cases of bronchiectasis has been presented, and their diagnostic and clinical features discussed. The various methods of treatment have been presented. The relationship of atypical pneumonia to bronchiectasis has also been discussed.

From our study of these cases we may conclude that when we see patients who give a history of repeated attacks of pneumonia, we should look for a local cause for this occurrence. These patients may have an undiagnosed case of bronchiectasis.

607 Kales Building

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# Postoperative Ileostomy Management

## A Simplified Technique

By E. T. Thieme, M.D., and W. D. Cheney, M.D.

St. Joseph's Mercy Hospital

Ann Arbor, Michigan

THE POSTOPERATIVE management of the patient with an ileostomy may be a difficult one for both the surgeon and the patient. From the surgeon's viewpoint, it is ideal to have the patient ambulatory as soon after operation as possible, in order to minimize postoperative complications.<sup>6</sup> However, patients requiring an ileostomy are frequently in poor general health immediately following operation so that ambulation is not inviting, particularly if bundlesome and disagreeable dressings must be endured. Another problem frequently encountered with the ileostomy, in contrast to the colostomy, is that of preventing digestion of the abdominal skin immediately surrounding the ileostomy pedicle by digestive juices abundant in the drainage.<sup>1,3,9</sup> This latter complication presents a very painful and uncomfortable situation for the patient, and too often, a fruitless search by the surgeon for a protective paste which will adhere to the abdominal skin surface and resist this digestive action of the small intestinal secretions.

Many ointments and pastes have been tried. Some have been used primarily to absorb and neutralize the digestive fluids, such as Fuller's earth powder,<sup>2</sup> peptone solution, or urea compounds. Other pastes have been used to protect the skin, such as aluminum hydroxide paste, zinc oxide or vinylite resin.<sup>3,5,7</sup> None has been particularly satisfactory. The hourly change of dressings, as suggested by Dennis, is effective but certainly adds to the postoperative nursing problem.<sup>3</sup>

The introduction of skin grafting of the ileostomy pedicle, in an effort to minimize prolapse of the ileum, demanded a suitable method for the postoperative dressing of the wound. Even though the skin grafting procedure has fallen into disfavor with some surgeons, a suitable dressing of the ileostomy pedicle is imperative, whether or not the graft is used. This dressing must elimi-

nate excessive trauma to the pedicle and reduce to a minimum the accumulation of feces at the wound site. These two demands are satisfied if, at the termination of the operation, the surgeon introduces a soft, small-caliber rectal or colon tube into the lumen of the ileum for a distance of four to six inches and secures it by surface dressings.<sup>4</sup> Postoperative, transient edema of the bowel will also aid in maintaining the tube in place. This, then, allows drainage of the ensuing liquid feces away from the wound site. By means of a glass adaptor, the colon tube may be attached to a longer rubber tube draining into a receptacle at the bedside, suitable for accurate measurement that will allow for proper replacement of fluid and electrolyte losses. As long as the patient remains on intravenous fluids or a liquid diet, this method will insure almost complete removal of feces from the wound site, and the dressings may be left *in situ* until time for removal of sutures.

With removal of sutures, decrease in bowel edema, and progression to a soft diet, a spillage of feces around the tube will necessitate its removal. At this stage it is desirable to eliminate the method of wound dressing by which the feces are allowed to drain into the dressings or onto the exposed abdominal wall.<sup>2</sup> An ileostomy bag aids in the solution of this problem. For many years, ileostomy bags have depended upon a tight belt with pressure against the abdominal wall to prevent fecal leakage out around the stoma. This pressure applied through a firm metal ring of the bag against the abdominal wall has frequently produced herniation of the bowel, as well as aggravating prolapse of the mucosa of the ileum.<sup>2</sup> The introduction of the Rutzen bag has helped tremendously in overcoming these difficulties.<sup>3</sup> This bag can be cemented securely to the abdominal wall without pressure and represents a real advancement in the care of the ileostomy. However, alterations will occur in the ileostomy over a period of six to eight weeks following operation, necessitating repeated alterations of the "bag facing," if a satisfactory fit is to be maintained. The Rutzen bag alone will not entirely meet this demand. Dennis states that his group maintains a supply of Rutzen bags of varying sizes to fit the patient until such time as stabilization is reached and a permanent fitting can be accomplished.<sup>3</sup> However, a small general hospital, staffed with surgeons qualified and capable of constructing an ileostomy, may find such a plan impractical and

expensive. For solution of this problem, an ileostomy bag cheaply constructed from a rubber glove has been found convenient and can be held securely in place by the cement compound previous-

the skin cleaned and dried with benzine or naphtha gasoline (unleaded). The Rutzen cement is applied to the skin around the ileostomy to conform to the pattern of the facing on the glove.

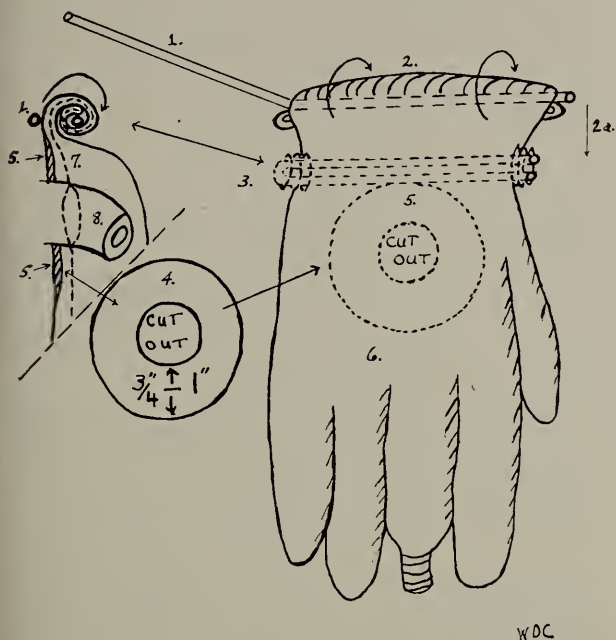


Fig. 1. Details of bag construction and application: (1) insulated electrical wire; (2, 2a) direction of rolling the cuff in closing; (3) site and configuration of bag top when closed (approximately 2 inches below cuff edge); (4) ring of "cold" tire patching ready for application to dorsum of glove; (5) bag facing as applied to glove, permitting glove to be cemented to the abdomen; (6) dorsum of rubber glove; (7) site of rubber dam and its fixation within the bag; (8) ileostomy pedicle.

ly mentioned. (Cement is obtainable from H. W. Rutzen, 3952 N. Lowell Ave., Chicago 41, Ill.).<sup>8</sup>

For construction of the bag, one needs a pair of "kitchen" type rubber gloves, size 10 or larger, and a kit of automobile tire patching (Fig. 1). A ring  $\frac{3}{4}$  to 1 inch wide of "cold" tire patching is cut, the center being shaped to fit snugly around the ileum at its junction with the abdominal wall. This ring then is cemented to the dorsum of the glove and the center cut out so that the glove itself can be cemented to the abdomen with the Rutzen cement.<sup>8</sup> A second ring of patching, identical to the first and applied in the same manner, is often helpful in obtaining a more firm, but still pliable, facing. Two bags are constructed, one from each of the gloves.

The bag is now ready for application to the abdominal skin. The Rutzen cement is applied to the bag facing, and an ordinary corset stay, folded end to end, is inserted inside the glove through the cuff, then released to provide even tension at the bag facing. The ileostomy pedicle and surrounding abdominal skin are cleared of feces and

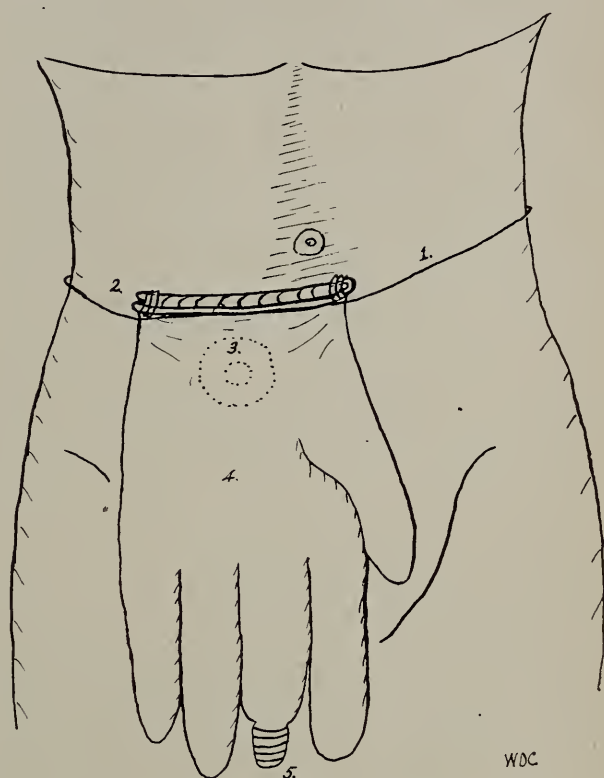


Fig. 2. Schematic representation of "glove-bag" as worn by patient: (1) uplifting band encircling body and looped over closed top of bag; (2) cuff rolled, closed, and ends secured with rubber bands; (3) site of pedicle within bag; (4) palmar surface of glove; (5) longest finger with tip cut off and secured against leaking with rubber band.

The glove bag is then applied to the skin around the pedicle before removing the corset stay. Now, the bag acts as a receptacle for the drainage of feces. The cuff of the glove is rolled over a split tongue blade, or, better still, a pliable piece of insulated electrical wire, the ends of which are brought together after the roll is completed and secured with rubber bands (Fig. 2). The wire will conform to the shape of the abdomen and is more comfortable than the tongue blade. A string or an elastic band tied loosely around the waist and over the folded cuff holds the top of the bag snugly to the abdomen and acts as an "uplifting" rather than a compressing band.

In order to empty the bag without removing it, the tip of the longest finger is snipped off, folded once upwards, then in thirds from side to side, and finally is secured with a rubber band. Now, one has a leak-proof, odor-proof ileostomy bag of inexpensive construction that will allow emptying at



will, prevent accumulation of feces on the skin, eliminate disagreeable odors and bundlesome dressings, and is comfortable to wear. At any time the surgeon may inspect the ileostomy by opening the cuff of the glove from above. This improvised bag can be applied four to six days postoperatively and eliminates the use of pastes and dressings.

Since it is desirable to keep feces away from the skin graft or the base of the ileostomy, a rubber dam, loosely placed inside the bag and fitted snugly around the distal end of the ileostomy pedicle, facilitates drainage of feces away from the area of ileostomy. Those patients subject to skin excoriation and painful fissure formation at the base of the pedicle will find the rubber dam a definite aid in preventing the occurrence of either condition. The hole in the rubber dam is cut slightly smaller than the caliber of the pedicle. The top end of the rubber dam is rolled in the cuff, fixing it in place as the bag is closed (Fig. 1). Elevation of the head of the bed whenever the patient is reclining keeps the feces from accumulating beneath the rubber dam.

The bag should be changed every twelve hours.<sup>8</sup> A few drops of the naphtha applied to the skin allows removal of the bag painlessly. A cotton roll saturated with the naphtha and used to separate the bag facing from the skin is often helpful. The glove is easily cleaned (without turning inside out) by washing in soap and water, rinsing, drying with a cloth, and hanging in the air to dry. Suspension by a "pincher" type clothes-pin clipped to one edge of the cuff will keep the inside of the glove exposed to the air. The cement accumulating on the facing should be scraped off with a blunt instrument and the patching scrubbed thoroughly with naphtha approximately every two weeks, or whenever the facing surface becomes roughened enough to allow seepage of feces under the inner edge of the facing.

Using such a device, the size of the bag facing can be changed frequently as needed and inexpensively by one of two methods: (1) superimpose a new piece of "cold" patching with altered stoma over the original facing, or (2) construct an entirely new set of bags. The bag facing will remain pliable and will fit the contour of the abdominal skin; yet any pressure promoting prolapse is always at a minimum. At the end of the six- to eight-week adjustment period, when the ileum pedicle has stabilized with respect to size,

the patient may then change to the more elaborate Rutzen bag or other equipment, if he desires.

### Summary

A simple, inexpensive ileostomy bag is described for early postoperative use in the management of the single pedicle ileostomy, with or without skin graft.

Skin irritation is eliminated; feces are drained from the wound site.

Disagreeable dressings, odors, and feces are eliminated without discomfort to the patient.

Early ambulation is made easier.

This ileostomy bag is easily and inexpensively changed to conform to the variations in size and shape of the ileostomy pedicle.

The device is simple enough for construction and maintenance by the patient, and the materials are readily obtainable.

The bag is comfortable and easily cleaned.

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### HIDDEN TITHES

The other day we were told by an acquaintance, in all seriousness, that he did not see what all this tax fuss was about. He had just figured out that he had to pay the federal government only \$6 in income taxes this year.

What he meant, it developed, was that he paid only \$6 in addition to the \$204 which was deducted from his pay envelope.

The \$6 was money he once had in his possession and then had to pay out. The \$204 he never saw and never figured into his family budget. Because he had never had it, he didn't think of it as something taken away from him. His "pay" was what he got, not what he might have got.

If thus subconsciously he could ignore \$204 as taxes, how could he conceive of his unseen \$30 contribution to social security as taxes? Or, further, the \$30 "contributed" by his employer—which he never saw even as a figure on a withholding slip—as a tax upon himself?

This whole \$270 is money he earned by working for a year. But it is money he can never get except as some government bureau may, in its kindness, some day "give" him a "benefit."—From the *Wall Street Journal*.

# Electrocardiographic Changes in Patients Receiving Tetraethylammonium Chloride Intravenously

By Raymond W. Monto, M.D., and  
John W. Keyes, M.D.  
Detroit, Michigan

RECENTLY THERE HAVE appeared in the literature numerous papers regarding the use of tetraethylammonium chloride (hereafter designated by TEA), a quaternary ammonium ion, in the diagnosis and treatment of certain diseases. The drug has been studied in the selection of hypertensive patients who might be expected to have favorable results after lumbodorsal sympathectomy.<sup>3,4</sup> Preliminary investigation suggests that it may be beneficial in the treatment of hypertensive encephalopathy. Communications have dealt with the employment of this drug in the diagnosis and treatment of various peripheral vascular diseases, including thromboangiitis obliterans (Buerger's disease), arteriosclerosis obliterans, thrombophlebitis, and certain functional vasospastic conditions, such as Raynaud's syndrome, acrocyanosis and livedo reticularis.<sup>2</sup> Probably the best clinical response in the therapeutic use of TEA has resulted from treatment of certain causalgic states whose cyclic transmission of impulses produces the well-known syndrome. Investigation of possible uses of the tetraethyl ion in diseases of other body systems, that is, the gastrointestinal tract (lessening of intestinal motility), trophic ulcers, et cetera, is being conducted.

Acheson and Moe<sup>1</sup> have demonstrated that the TEA ion partially blocks the transmission of sympathetic and parasympathetic nervous impulses. It is principally from this action upon autonomic ganglia that its clinical value has been derived. The side effects of TEA intravenously, in doses of 200 to 400 mg., are usually transitory and are frequently found to be a metallic taste in the mouth, generalized paraesthesias, dryness of the mouth, blurring of the vision, ptosis, dyspnea, and weakness. In certain instances, however, peripheral vascular collapse, dysarthria, dys-

TABLE I. PATIENTS STUDIED ELECTROCARDIOGRAPHICALLY AFTER THE INTRAVENOUS ADMINISTRATION OF TETRAETHYLAMMONIUM CHLORIDE

Arterial hypertension (essential) .....	11
Arterial hypertension (essential) with minor cerebral thrombosis .....	2
Chronic glomerular nephritis with hypertension .....	1
Arteriosclerosis obliterans .....	1
Causalgia .....	1
Patients without vascular disease (control) .....	7
Total .....	23

phagia and temporary respiratory paralysis have been observed when large doses are employed.

During the testing of hypertensive patients with TEA in an effort to select suitable cases of essential hypertension for sympathectomy, the marked fall in both systolic and diastolic pressure in a few cases was associated with symptoms not unlike those usually observed with coronary insufficiency. For this reason the present study was undertaken.

## Method of Study

Patients included in this investigation were those undergoing observation for (1) arterial hypertension, (2) peripheral vascular disease, (3) causalgias, and (4) patients without vascular disease used for control comparison purposes. All of the patients included in the observations had been hospitalized at least three or four days, and the initial blood pressure readings were felt to be at basal levels. In an effort to allay fear and anxiety, each individual was briefed as to the effects of the drug and assured of its transient nature.

The amount of TEA used in each case was usually 400 mg., administered intravenously over a period of sixty to ninety seconds, but in an occasional individual whose blood pressure fell more precipitously, only 300 mg. were given, and in one case only 200 mg. The total dose, however, did not exceed 7 mg. per kilogram of body weight. Before the administration of the drug, a control electrocardiogram was made, utilizing the standard axial and precordial leads. A second electrocardiogram was taken immediately at the time when the maximal fall in blood pressure was felt to have occurred. This usually took place one to three minutes after the injection of the drug was completed. The third and fourth electrocardiograms were obtained at approximately fifteen-and-thirty-minute intervals. In an occasional patient whose electrocardiogram had not returned to its original form, another tracing was

Dr. Monto is from the Division of General Medicine and Dr. Keyes is from the Division of Cardio-Respiratory Diseases, Henry Ford Hospital, Detroit, Michigan.

The tetraethylammonium chloride (Etamon) used in this study was generously supplied by the Parke, Davis Co., Detroit, Michigan.



made after a twenty-four-hour period. Table I shows the various groups studied.

It is the purpose of this communication to serve only as a preliminary report and to cite three cases

ST and T wave aberrations from the initial control electrocardiogram. These, while not specifically diagnostic, do, nevertheless, represent distinct effects produced by the administration of TEA.

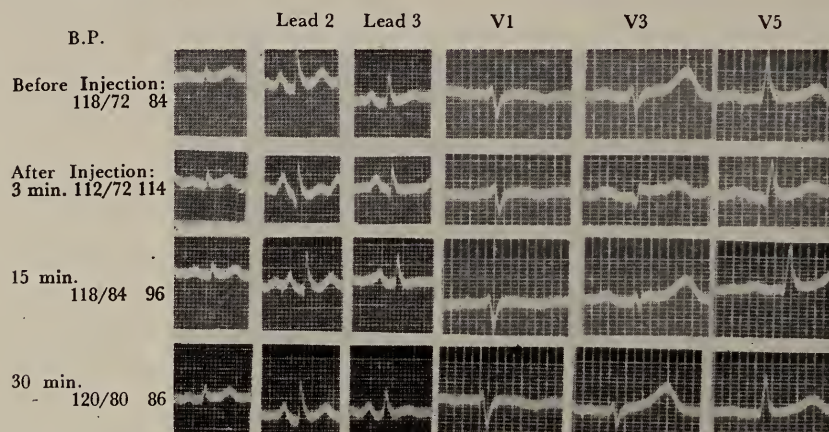


Fig. 1. Serial electrocardiograms taken before and after the intravenous injection of 300 mg. of tetraethylammonium chloride. Case 1: Diagnosis, neurasthenia, aged twenty-nine; weight 100 pounds, (45.5 kilograms).

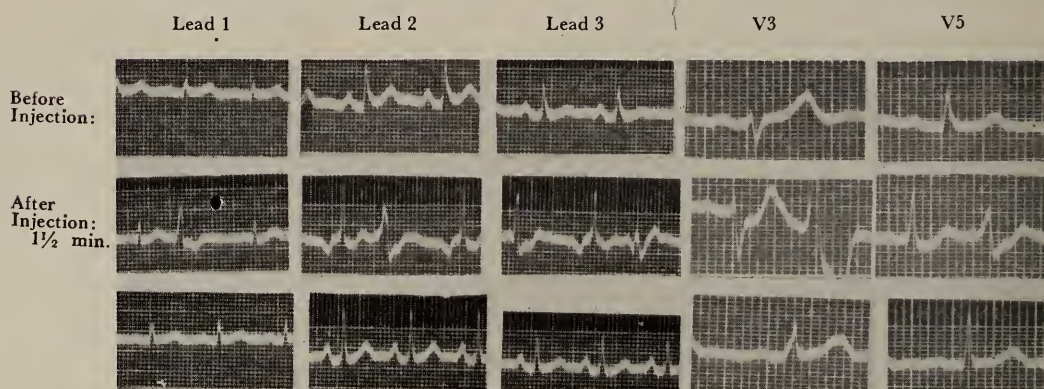


Fig. 2. Cardiac arrhythmia produced by the intravenous administration of 300 mg. of tetraethylammonium chloride, followed by 2 minims 1:2600 of epinephrine (adrenalin) intravenously. Case 1.

in which distinct electrocardiographic abnormalities occurred, one of whom showed serious reaction to the intravenous use of adrenalin after the administration of TEA.

### Results

No significant changes were observed in the P waves or PR interval and segment. The QRS interval was unaffected, but specific changes occurred in one instance, the details of which are included below in the presentation of the case. Major ST interval and T wave changes occurred in four cases (16 per cent), three of which will be presented. It is planned to present a more detailed analysis in a subsequent review of all cardiographic findings, which include minor changes involving QRS,

### Report of Cases

*Case 1.*—A white woman, aged twenty-nine, weight 100 pounds (45.5 kilograms), with a diagnosis of neurasthenia and without evidence of cardiovascular disease, was studied for control purposes (Fig. 1). In the initial electrocardiogram the most important finding was absence of Q waves in the standard extremity leads. There was slight ST segment elevation in these leads, but not of pathological significance. Following the administration intravenously of 300 mg. of TEA there was an increase in heart rate from 84 to 114 per minute. Prominent Q waves appeared in standard leads 2 and 3, and in lead V3 the R wave disappeared, leaving only a QS deflection followed by an elevated ST segment and an upright T wave. T waves became flattened, but not inverted in standard leads 2 and 3. The electrocardiogram returned to its former configuration in the fifteen- and 20-minute tracings, except that the QRS deflection remained unusually small in lead V3. No marked change in blood pressure was noted.



In an attempt to study further these electrocardiographic changes the patient was recalled three days later for another TEA test, using the same dosage as before. Immediately after injection of TEA the pa-

are shown the chronological changes which occurred in the blood pressure, pulse and electrocardiogram. It is worthy to call attention to the actual slowing of the heart rate in spite of marked fall in systolic and diastolic

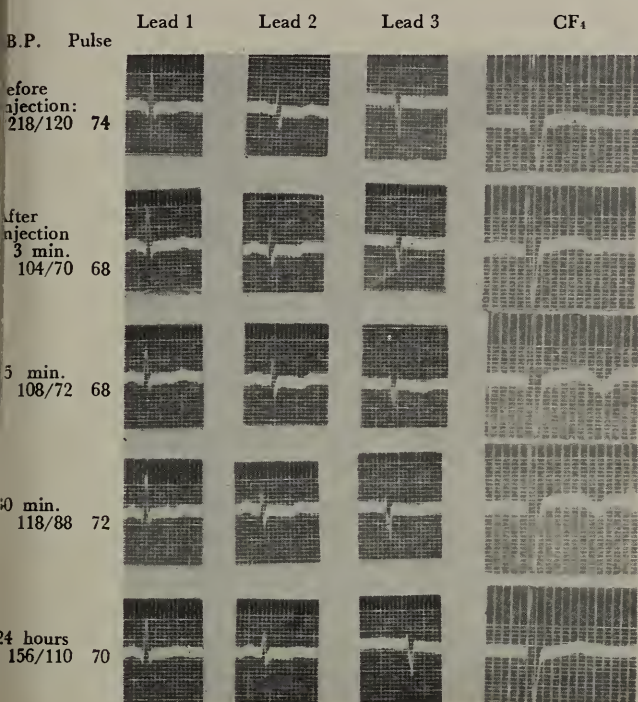


Fig. 3. Serial electrocardiograms taken before and after the intravenous injection of 400 mg. of tetraethylammonium chloride. Case 2: Diagnosis, hypertension, essential, with hypertensive heart disease; aged fifty-two; weight 182 pounds (82 kilograms).

tient was given 2 minims of 1:2,600 adrenalin intravenously. Within seconds the patient blanched over the entire exposed skin surfaces, the blood pressure could not be obtained, and the patient became unconscious and appeared cadaverous. It was estimated that in about thirty seconds a faint irregular heart action could be detected. At this point an electrocardiogram was made (Fig. 2). Respiration slowly returned, the blood pressure could now be obtained, and the patient regained consciousness, experiencing marked weakness and the sensation of "a large gas bubble" in the lower sternal region. This distress persisted for approximately twenty-four hours. In the electrocardiogram taken after heart tones became audible, a high nodal or coronary sinus rhythm was present, with ventricular premature beats producing coupling. There was pronounced ST segment depression in the axial standard leads 2 and 3 and in V3 and V5. Within fifteen minutes normal sinus rhythm had re-established itself and segment ST changes had disappeared. The heart rate persisted at about 100 for a period of twenty-four hours, at the end of which time the T waves had all increased in amplitude, even over the control level, in both the standard and precordial leads.

**Case 2.**—A white man, aged fifty-two, weight 182 pounds (82 kilograms), with a diagnosis of essential hypertension, received 400 mg. of TEA. In Figure 3

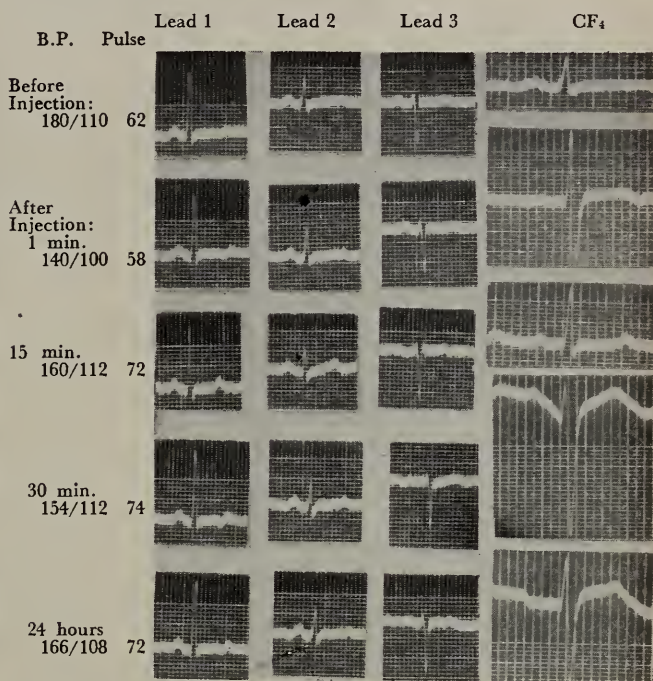


Fig. 4. Serial electrocardiograms taken before and after the intravenous injection of 400 mg. tetraethylammonium chloride. Case 3: Diagnosis, essential hypertension with hypertensive heart disease; aged fifty-one; weight 177 pounds (80.5 kilograms).

pressure. The initial electrocardiogram revealed diphasic T waves in standard leads 2 and 3 with slight ST segment depression in all three limb leads. These became more exaggerated in subsequent tracings but had returned to their former configuration within twenty-four hours. In the precordial lead CF<sub>4</sub> the T wave, originally multiphasic, became definitely inverted in fifteen-to thirty-minute tracings. As in the standard leads, the configuration had returned to normal within twenty-four hours. These changes, although compatible with those seen in coronary insufficiency, were not associated with cardiac distress.

**Case 3.**—A colored woman, aged fifty-one, weight 177 pounds (80.5 kilograms), diagnosed essential hypertension, received 400 mg. of TEA intravenously. Figure 4 represents the chronological changes in electrocardiogram, pulse and blood pressure which were observed. In the standard leads the diphasic T waves in leads 2 and 3 became significantly altered to become actually upright. Less specific information can be derived from the precordial CF<sub>4</sub> leads, but, here again, a distinct alteration is observed with a negative T wave with ST elevation in the one and one-half-minute period graph to the fifteen-minute period.

### Discussion

Lyons and associates<sup>4</sup> report that while the possibility of the development of coronary ischemia



TABLE II. CHANGES IN CARDIAC RATE IN PATIENTS  
RECEIVING TETRAETHYLAMMONIUM CHLORIDE  
INTRAVENOUSLY

	Heart Rate In- creased Less than 10/min.	Heart Rate In- creased Greater than 10/min.	Heart Rate Slowed Less than 10/min.
Patients with cardio- vascular disease	9	4	2
Patients without car- diovascular disease	0	8	0

and angina pectoris as the result of sudden drop in the blood pressure of hypertensive patients was considered, it was not observed in their cases. Two patients suffering from acute myocardial infarction, studied by them, were dramatically relieved of their pain after the intravenous administration of TEA and without alteration of their electrocardiograms. In a few patients with angina pectoris, similarly observed, no pain or change in the electrocardiogram developed with marked transient fall in the blood pressure. The time interval between the injection of the drug and the electrocardiograms was not given. In the present study three patients demonstrated major changes in their electrocardiograms when taken serially, two of which did not return to their previous configuration for a number of hours. In five patients minor electrocardiographic changes involving the St-T segment were of transient nature, disappearing within thirty minutes after the intravenous injection of TEA.

The electrocardiograms presented demonstrate alterations compatible with coronary insufficiency. As all of the significant abnormalities disappeared within twenty-four hours, no persistent effects on the heart rate were noted.

Marked changes in the electrocardiogram were observed in Case 1 in spite of absence of fall in blood pressure. Previous reports have indicated a general elevation of heart rate to 100-120 per minute after the intravenous injection of TEA. Tachycardia with increased pulse rate as high as 40 beats over initial reading has been observed by Birchall et al.<sup>3</sup> Table II illustrates the changes in cardiac rate noted in patients receiving TEA intravenously in this study.

Almost all of the patients exhibiting increase in heart rate presented clinical symptoms of anxiety. The seven patients studied without evidence of cardiovascular disease were hospital patients under observation for various forms of increased nervous tension which could be easily exaggerated by the peculiar sensations experienced after TEA injection.

Attention is directed to Cases 2 and 3; no significant change in pulse rate was encountered as one would expect in individuals experiencing a remarkable drop in blood pressure. This observation may explain in part the unsatisfactory results by some workers in the attempt to select patients by the use of TEA for sympathectomy in the treatment of essential hypertension. As stated by Birchall et al.,<sup>3</sup> a drug with such widespread pharmacologic action as TEA "might be expected to affect the blood pressure in a manner different from that of sympathectomy and ganglionectomy."

Adrenalin (epinephrine) and neostigmine have been recommended as drugs which counteract undesirable reactions from TEA. Case No. 1 was studied before the recent publication of Page and Taylor,<sup>5</sup> who warned against the use of adrenalin intravenously in patients who had just received TEA. Their experiments in dogs demonstrated marked augmentation of the pressor effect of adrenalin in animals previously sensitized by intravenous TEA. The possibility of damage to the cardiovascular systems of patients with coronary disease or cerebral lesions was considered by these authors as the result of the marked rise in blood pressure subsequent to severe vasoconstriction. While Case No. 1 demonstrated evidence of profound cutaneous vasoconstriction, the explanation of the apparent cessation of heart action is not apparent. The TEA may have augmented the vagal action of adrenalin with resultant cardiac standstill and gradual return of rhythm established probably by nodal escape or nodal rhythm. Another possible explanation would be a transient ventricular fibrillation produced by the augmented adrenalin effect.

### Summary and Conclusions

1. The administration of tetraethylammonium chloride intravenously to fifteen patients with cardiovascular disease resulted in temporary major ST-T segment changes in two instances and minor changes in five other cases.

2. Eight patients without evidence of cardiovascular disease received tetraethylammonium chloride intravenously, one of whom demonstrated marked alteration of the cardiogram, indicating transient myocardial ischemia.

3. A patient who received 2 minims of adrenalin (epinephrine) 1:2,600 intravenously immediately following the injection of tetraethylammonium

(Continued on Page 606)

# Histoplasmosis

By Paul A. Van Perno, M.D.  
Grand Rapids, Michigan

able number of persons who are tuberculin negative but who have positive evidence of hilar calcification on x-ray examination of the chest are histoplasmin positive.<sup>3,10,12,13,15,17</sup>

## Bacteriology and Serology

*Histoplasma capsulatum* is one of the group of fungi imperfecti existing in both yeast and mycelial forms. The hyphae are 2.5 to 11.5 microns in diameter and may be either straight, branched or septate. Chlamydospores range from 4 to 10 microns in diameter and are rich in fat. They are sessile, lateral, intercalary or pedicellate. The characteristic ascus-like bodies are 10 to 25 microns in diameter, rich in fat, and must be present for identification of the fungus organisms. At first they are smooth or crenate but later become spinose with barbs as long as 5 to 6 microns. They are attached to hyphae terminally, laterally or in the interstices. Studies of the life cycle of this fungus on chick chorio-allantoic membrane demonstrated changes in all three germ layers.<sup>11</sup> These changes are like those seen in humans with the disease. Injection of the mycelial form of the organism into mice and other animals produces histoplasmosis from which only the yeast form is recovered.<sup>14,21</sup> Considerable confusion in the nomenclature concerning this organism and its classification has occurred, but this now seems clarified following the work of Conant.<sup>4</sup>

Filtrates of broth cultures of this organism may be made for skin testing material and are now widely used, particularly by the U. S. Public Health Department. The organism grows readily on various media both at room and incubator temperatures. No special media are necessary. Simple blood agar or beef broth suffices. In fact the organism will grow well at room temperature in the buffy coat of whole blood from humans. The mycelial form usually grows at room temperature in fluid media, while the yeast form will grow on blood agar at 37° Centigrade. The specific substance can be easily extracted from broth filtrates and used as skin testing material or as the antigen for complement fixation tests.<sup>20</sup> Cross reactions in the human as well as experimentally have been described with *Blastomyces*, *Coccidioides* and *Halosporangium*.<sup>8</sup> These cross reactions, however, may be clarified in the near future by complement fixation tests similar in principle to the Kolmer test,<sup>9,18</sup> and further purification of the antigen.<sup>5</sup>

**M**EDICAL INTEREST in the disease histoplasmosis has reached a point where it becomes necessary to review the known facts about the disease. Some 150 papers have now been written describing investigative and case studies. However, the disease is still unrecognized in many sections of the country as well as abroad and is often not considered in a differential diagnosis in places where it is known. The difficulties and confusion encountered in clinical diagnosis of the disease are due in part to the variety of possible symptoms but are also partly due to the lack of knowledge about available diagnostic tests.

## Etiology and Epidemiology

The causal organism is *Histoplasma capsulatum*, a member of the fungi imperfecti which exists in both mycelial and yeast forms. The yeast form is pathogenic for men. The human becomes infected probably by inhalation of infective material, although entrance of the organism into the body by way of the alimentary tract and contaminated food must be considered. The disease has been found to occur naturally in dogs, in wild rats and in mice.<sup>1,2,6,7,16,19</sup>

There is little information concerning the morbidity of the disease. The published case reports deal only with those patients who have died. Heredity and environment seem to have no effect on the course, although the relationship to farm life or farm products is striking. The disease is endemic and not limited in geographic distribution. On the basis of skin tests, however, there seems to be a heavy distribution of the disease in the Mississippi valley. The age incidence of patients ranges from a few months to the seventh decade of life. In those patients who have died there have been about a two to one incidence in males as compared to females. The disease seems world wide in distribution, although the preponderance of reports have come from North and South America.

Mass surveys by means of skin tests, using filtrates of cultures of the organism, reveal that a consider-

Director of Laboratories, Butterworth Hospital, Grand Rapids, Michigan. Presented at the first Hope College Medical Day Program.



### Pathology

The organism, once established in the body, invades many tissues. It seems to have a preference for tissues of the reticulo-endothelial system and hence has been called "reticulo-endothelial cytomycosis." The lesions grossly are similar to the manifestations of tuberculosis, and so both miliary nodules, ulcerations with or without hemorrhages and focal regions of necrosis are seen. The lesion typically is a granuloma both in man and in experimental animals.

Microscopically the yeast form is found in various types of cells. They have been described in alveolar cells of the lungs, in monocyctic phagocytes of alveolar and bronchial exudates, nasal, buccal, palatine or laryngeal ulcers, skin, epicardium, meninges, duodenal serosa, intestinal lamina propria, periportal regions of the liver, the spleen, lymph nodes, the renal medulla and glomerular tufts, ear exudates, lymph nodes, in medullary and cortical cells of the suprarenal gland, in synovial exudates and in the acinar epithelium of the prostate.

Accompanying these parasitized cells are lymphocytic exudates with or without necrosis, scar tissue or hyaline masses. Giant cells have been seen in the spleen and are similar to the giant cells seen in tuberculosis. Phagocytized mononuclear cells are abundant. In the lung a lymphocytic bronchopneumonia may develop.

The invaded cells may have only four or five coccoid bodies, or fifty or more. These bodies are 2 to 4 microns in diameter with central dark blue granules and pale pink cytoplasm surrounded by a refractile capsule, in hematoxylin and eosin-stained preparations. These granules may be single or four or five in number. They sometimes form chains or crescents within the organism that suggests the merozoites of some of the protozoan parasites. At times the cytoplasm appears vacuolated.

### Symptomatology

This disease seems best characterized by the syndrome first described by Darling of hypochromic anemia, low grade fever, weight loss and splenomegaly. Hepatomegaly, lymphadenopathy, anorexia, ulceration of the oral, buccal or tongue mucosa, skin ulcerations, purpura, bullae, scaling or nodules, ulcerations of the pharynx and larynx and joint lesions have been reported. Many patients have had weakness and skin pigmentation like that seen in a patient with an Addison's syndrome.

Blood chemistry findings have not been remarkable. Blood chlorides and blood pressures, however, have not been lowered. Clinical laboratory findings in general have yielded little information. X-ray findings of calcified nodules in the lung fields, consolidations or cavity-like lesions have been found which closely resemble the findings of tuberculosis. When these changes are seen, skin testing reveals a considerable number of tuberculin-negative individuals who do have positive skin tests with histoplasmin or coccidioidin, thus explaining a long standing enigma.

### Diagnosis

The diagnosis of this disease may be made in various ways. Stains of peripheral blood or bone marrow may reveal mononuclear cells containing the coccoid bodies. Biopsies from ulcerated or nodular lesions may furnish histological as well as cultural evidence of the disease. Dextrose broth or brain-heart infusion broth filtrates of the fungus may be used in preparing histoplasmin for use as skin-testing material or used as the antigen for a Kolmer type complement fixation test. The skin reactions are characterized by an urticarial wheal-like lesion, 1 to 2 cm. in diameter, appearing with undiluted filtrate in fifteen to thirty minutes after the injection. A delayed reaction, clearly visible after twenty-four to forty-eight hours, may appear, consisting of a marked erythema and swelling of the skin with some induration and gradual disappearance after five or six days. A dextrose broth culture may be filtered, treated with three volumes of acetone and a specific substance which is precipitated, suspended in saline and used as the antigen. The test should be done using varying dilutions, and a control also done, using the fluid uninoculated culture media, in a similar fashion. The diagnostic antigen is now produced commercially,\* although it is still in the research stage.

### Prognosis

Until wide usage of the skin test occurred, only fatal infections had been reported. Some patients seemed to die from a pneumonia and others from "cardiac failure." However, lesions of the suprarenal glands were reported in a goodly proportion of the cases, and death in these patients may have been due to suprarenal insufficiency.

It is now known that histoplasmosis is not necessarily a fatal infection, since many persons have

\*Eli Lilly and Co.

positive skin tests with x-ray evidence of the disease which heals in time. This disease, then, is analogous to the process occurring in tuberculosis and coccidiomycosis. Individuals with positive skin tests, positive cultures and tissue evidence of the invasion of the fungus have been and are being studied. So far some of these patients show progressive evidence of healing. It is entirely possible and quite probable that a so-called "childhood type" of the infection may occur without any more symptoms than those seen in the "childhood type" of tuberculosis. It is likely that this is a pulmonary infection as in tuberculosis and coccidiomycosis. Why some individuals develop a widespread, "caseation type," "cavitation type" or miliary type of the disease with a fatal termination has not been demonstrated, but it is probable that the same chain of events as is seen in tuberculosis occurs.

### Treatment

Various agents have been tried in an attempt to halt the progress of the disease. Among them are quinine, potassium iodide, neoarsphenamine, bismuth subnitrate, stovarsol, ionized copper, roentgen-rays, splenectomy, sulfonamides, pentanucleotide, blood transfusions, potassium arsenite, tartar emetic, antimony and potassium, and even penicillin and streptomycin.

There is no specific therapy. It is probable that the same regime used in the therapy of tuberculosis is most efficacious. Good nutrition, general rest and specific rest of organs involved are essential as in the therapy of tuberculosis. In general, the affected tissues must be given a chance to wall off and arrest the disease with their own antagonistic elements such as the macrophages, scar tissue, and deposition of calcium.

### Summary

A brief review of the current knowledge of the disease histoplasmosis has been given in the hope that more widespread recognition of the extent of the disease will occur. This disease must be considered in any individual suspected of having either pulmonary or systemic forms of tuberculosis or coccidiomycosis. At present, a diagnosis may be made by biopsies and skin tests similar to the tuberculin and coccidiomycin skin tests. A complement fixation test based on the principles of the Kolmer test is now under investigation.

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### AS WE SEE IT

Quietly, without a hint of what was coming, Great Britain has knocked for a loop all the other lands that compete for the tourist dollar—or for that matter the tourist lira, franc, mark, peso, doubloon or what have you.

Just as the foreign travel ads enter their verdant season, the sly British reveal that visitors are every bit as eligible for free medical treatment, including wigs and false teeth, as the native Britons.

Consider what this will mean to the family trying to choose between a summer abroad and having little Lucy-belle's teeth straightened. It's the solution. You get your trip and Lucy-belle's braces all for the price of one.

Or how can a French chateau compete with the English manor house as a sightseeing attraction for the balding tourist? By gazing at the manor house he can get a wig (average value \$40) thrown in gratis. The best the French can do is offer a little free wine with his omelet.

But just think! If we follow the communistic-minded gents who are guiding affairs—or trying to—at Washington and accept Socialized Medicine, as England has, what we will be up against. Anybody from Windsor can come over here and get a wig or a new denture or what will you, for free.

We will have to cover every bald head and fix the teeth of every ailing person on earth. This is worse than giving all the Hottentots that morning bottle of milk.—Editorial, *Detroit Free Press*.



# Nodular Diseases of the Extremities

By Arthur R. Woodburne, M.D., and  
O. S. Philpott, M.D.

Denver, Colorado



A. R. WOODBURNE, M.D.

**M**ODERN DERMATOLOGY was first interested in skin diseases following their classification according to morphology or "naked eye" appearance. Robert Willan (1798) in England gave us one of our first morphologic classifications. In France, Alibert (1810) enlarged upon

this classification of skin diseases. These morphologic classifications remained the bases of study until Von Hebra in Germany, in the middle of the nineteenth century, gave us his classification based on a study of the pathology or morbid anatomy. His work was continued by Unna, Cranston Lowe, the elder Fox and many others, and has remained the basis of our knowledge of skin disease to the present time.

I wish to discuss here a group of diseases which in "naked eye appearance" and in microscopic pathology may be indistinguishable, but which have definite differences and stress the importance of studies of the entire patient, along with careful clinical observation, over a prolonged period of time to make an accurate diagnosis.

For many years there has been a growing feeling that erythema induratum is not always a tuberculous disease. Telford<sup>11</sup> goes so far as to say that erythema induratum is not of tuberculous origin. Novy<sup>10</sup> feels that his case was not tuberculous and quotes verbal discussion with Michelson, supporting his view in many cases of erythema induratum. Montgomery, O'Leary and Barber<sup>9</sup> discuss nodular vascular diseases of the legs in the light of our new knowledge of diseases of the vessels and stress the similarity of many of these diseases morphologically and pathologically.

During the past three years we have studied a group of nodular diseases of the extremities and

have been impressed with the necessity of a review of dermatologic knowledge in this field and a survey of our knowledge in view of recent advances in studies of the peripheral circulation. Medical literature in recent years has been full of articles showing the aroused interest in these diseases by general medicine. The internist is discovering lupus erythematosus disseminatus and scleroderma, diseases which until recently have been investigated only by the dermatologist. Involvement of the entire body, as seen in disseminate lupus erythematosus, and particularly sclerodermic involvement of the myocardium and intestinal tract are now drawing the interest of the internist to these diseases. Temporal arteritis<sup>6</sup> recurrent idiopathic thrombophlebitis<sup>3</sup> and nodular vasculitis<sup>1</sup> are diseases closely related to the group which we will discuss.

We will exclude from this discussion most of the generally known nodular diseases of the extremities in which the clinical picture is clear, such as gummata, scleroderma, myxedema, stasis dermatitis with and without infection and/or ulceration, sarcoid, and the granulomata such as sporotrichosis, actinomycosis, tularemia, et cetera.

A group of nodular, usually vascular diseases of the extremities, which have been frequently confused and rarely carefully differentiated, will serve as the basis of our discussion. European observers, notably Telford<sup>11</sup> and Gongerot,<sup>5</sup> have broadened the concept of erythema induratum to include most of these conditions; however, most American observers feel that the term erythema induratum should be confined to the definite tuberculous lesions.

## Erythema Induratum

Erythema induratum, as I employ the term here, refers to a nodular or nodulo-ulcerative dully inflammatory lesion usually found in the calves of girls or young women. The lesions are very chronic, usually break down with a serosanguineous discharge and are associated with systemic and, in some cases, other manifestations of hematogenous tuberculosis. The tuberculin test is positive. The microscopic picture is usually characteristically tuberculous, and tubercle bacilli can usually be found in the tissue, either by special staining or on animal inoculation. A typical example is illustrated by the case of a woman, M. A., aged thirty-two, who was seen first in the skin clinic with many chronic nodular lesions of the calves; about

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From the Department of Dermatology, University of Colorado School of Medicine, O. S. Philpott, M.D., professor; and the private practice of Drs. O. S. Philpott and A. R. Woodburne, Denver, Colorado.

two-thirds of these had ulcerated. The tuberculin test was positive, and a tuberculosis survey disclosed active pulmonary tuberculosis. This patient was put at bed rest for one year, and when



Fig. 1. (left) Nodular vasculitis, showing typical clinical picture. Ulcer is biopsy site.

Fig. 2. (right) Photograph is the same as Figure 1 but is taken with infra-red photography, showing the association of the nodules with the vessels.

the pulmonary process was arrested, the lesions of the legs cleared. However, she was seen two years later with a recurrence of the lesions of the extremities. The chest remained inactive. Charpy<sup>4</sup> treatment resulted in complete healing of the lesions of the legs.

Erythema induratum should be reserved as a diagnosis for those cases of definite tuberculosis in which the typical tuberculous structure of caseation and Langhans giant cells, surrounded by a zone of epithelioid cells and then an outer mantle of lymphocytes and plasma cells, are seen. In some cases, however, a banal chronic inflammatory tissue reaction will be seen even though tubercle bacilli may be found in the tissue and animal inoculation will prove positive.

### Nodular Vasculitis

Nodular vasculitis is a condition which has been largely overlooked by dermatologists and should be more thoroughly known. We have investigated seven cases of this disease in the past three years and are sure that it is much more common than is generally believed.

It is a nodular disease of the extremities, easily

confused on superficial examination with erythema induratum and erythema nodosum.

The patient is usually an otherwise healthy individual with a history of recurrent, mildly painful and tender nodules occurring on the anterior legs, thighs and more rarely on the upper extremities. The individual nodules vary in size from 1 to 5 cm. in diameter and are dully inflammatory. They persist for a few weeks to a few months and heal without atrophy, scarring or depression of the surface. Crops of nodules recur every few months, and the disease lasts for a few months to several years. There seems to be no increase in crops during cold weather.

Histologically there is seen a perivascularitis with little or no change in the epidermis, a diffuse lymphocytic infiltrate in the dermis, more marked about the vessels and coil glands. No aneurysmal pouches, necrosis of vessel walls nor polymorphonuclear infiltrate of the vessel walls is seen. The vessel walls are thickened with swelling of the endothelial cells. Collections of lymphocytes, plasma cells and occasional giant cells are seen deep in the dermis and in the upper adipose layer. These are largely perivascular, and in some older cases typical tubercle formation is seen, although extensive search for mycobacterium tuberculosis in section and with animal inoculation has been negative. We should all remember here that tissue has a relatively limited group of responses to an unlimited number of stimuli so that it is only reasonable that the tuberculoid architecture will be seen as a response to several stimuli. Michelson<sup>7</sup> has called our attention to this type of architecture in lymph nodes in primary and secondary syphilis. Montgomery<sup>8</sup> has stressed this phenomenon in non-tuberculous processes.

A patient should not be alarmed by calling tuberculoid architecture "tuberculosis" without more thorough study.

The tuberculin skin test is usually negative in these cases, and repeated complete tuberculosis surveys have been negative.

*Case 1.*—A typical case is that of a married housewife, R.W.S., aged thirty-eight, who had had recurrent, painful and tender nodules of the legs for eight months. These began as small, oval, tender areas, with new lesions developing every month or so. The first group was at the junction of the lower and middle third of the left leg. This group consisted of four nodules, each about 1.5 cm. in diameter. This case was followed over a period of 1 year, and during this time several groups





Fig. 3. Nodular vasculitis, X 17.5. Gross appearance of characteristic nodular lesions.

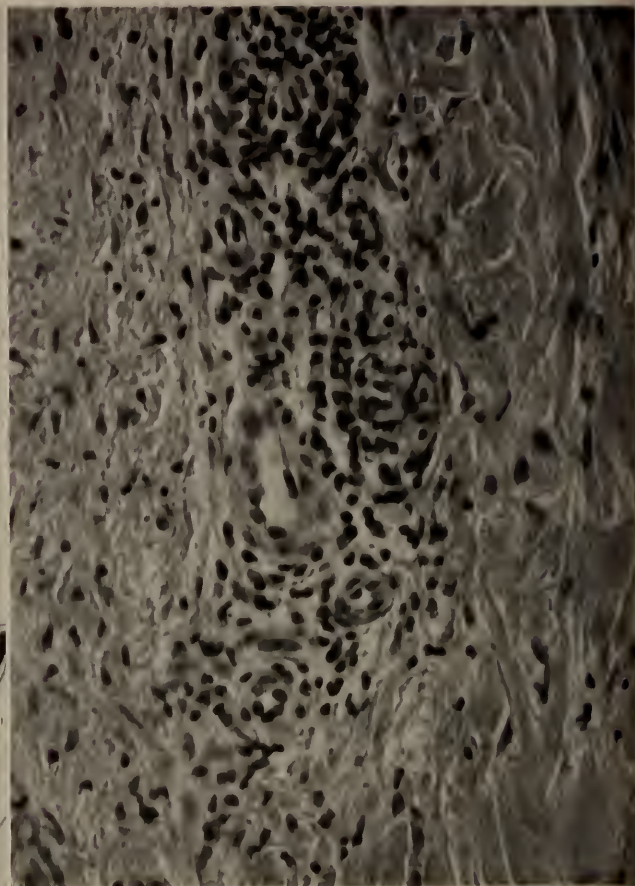


Fig. 4. From dermis shown in Figure 3. High power, X 330. Diffuse lymphocytic infiltrate with focal collection about vessels.

and single nodules have developed over the legs and lower thighs (Figs. 1 and 2). Healed areas show no depression of the surface, no atrophy or scarring. Two nodules have been removed for microscopic study and have shown the microscopic picture presented in Figures 3, 4, 5 and 6. Infrared photography has shown the close association of these nodules to the superficial vessels. The tuberculin skin test was negative, and tuberculosis survey has been negative. Urine examinations, blood counts and sedimentation rates have been normal on several occasions.

*Case 2.*—Mrs. E.J., aged fifty-four, had had recurrent attacks of this disease for five years, and microscopic examination of older involuting nodules had shown the typical tuberculous architecture, although all investigations, including animal inoculations, have been negative for other evidence of tuberculosis.

The Charpy<sup>3</sup> treatment has proven ineffective in this group. A search for foci of infection should be carried out. One patient's lesions cleared up following the removal of infected tonsils. Two have done well on large doses of salicylates and rest. Mrs. R.W.S., quoted above, was thoroughly searched for foci, and none could be found. She

cleared up completely after supporting her legs with web bandages. Allen<sup>1</sup> has reported gratifying results with the use of ascending but non-reaction-producing doses of streptococcus vaccine. Penicillin and the sulfonamides have proven ineffective in therapy. Apparently this entity may be caused by many toxins acting on the vessels of the extremities. Such damage may be produced by toxins caused by stasis, foci of infection, et cetera.

### Nodular Nonsuppurative Panniculitis

#### Weber-Christian Disease

This condition is seen usually in women and is characterized by deep, moderately painful and tender nodules most commonly seen on the legs and thighs. However, lesions may be seen over the hips, trunk and upper extremities at times.

Morphologically and on microscopic study, these closely resemble nodular vasculitis, although the pathologic changes are usually deeper in the subcutaneous panniculus.



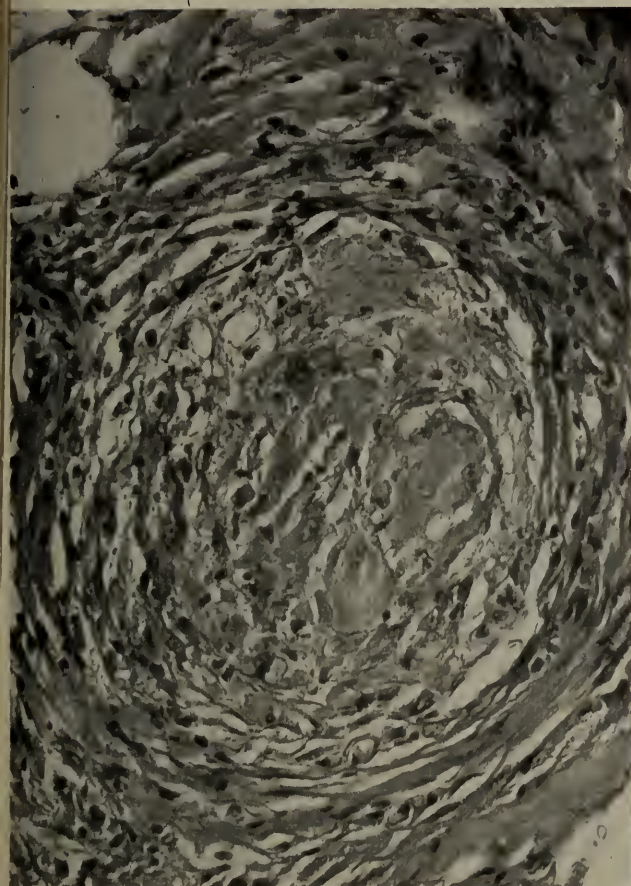


Fig. 5. High power, X 330. Lower in the same section shown in Figure 3. Large collections of lymphocytes, occasional nonnuclear cells, fibroblastic proliferation and a multinuclear giant cell.

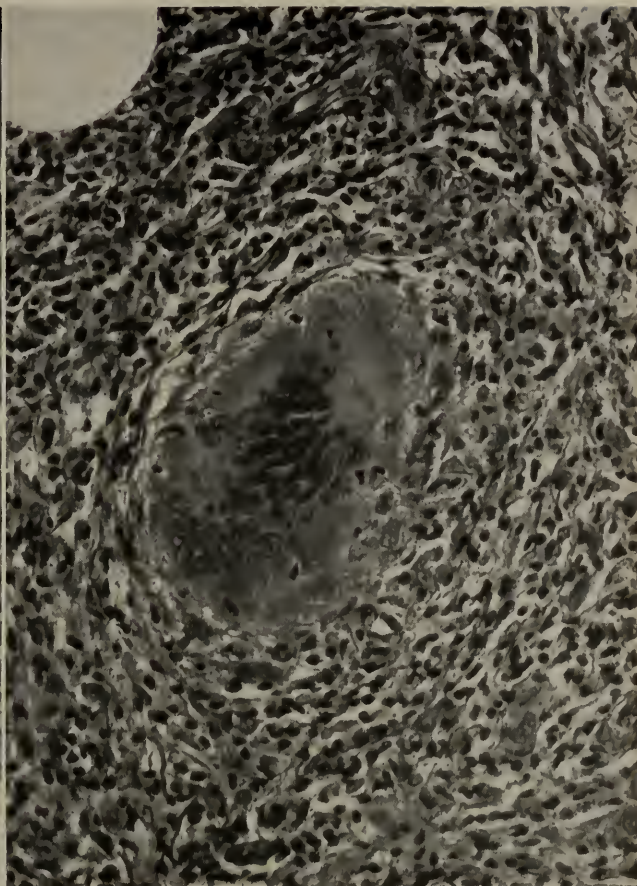


Fig. 6. High power, X 330. From the deep dermis, showing picture similar to that in Figure 5, with more epithelioid cells.

Healing in these occurs with depression of the overlying skin (Fig. 7) so that the late clinical picture is very characteristic and easily differentiated from erythema induratum and nodular vasculitis. This condition may be etiologically identical with nodular vasculitis, the difference being only in the depth of the lesion. Arnold<sup>2</sup> has temporarily stopped the formation of new lesions in one case with the administration of sulfapyridine. In one case that I have followed over a period of one year, no therapy has been helpful, and complete study has shown no systemic abnormality.

#### Poliarteritis Nodosa

Three cases of this condition have been diagnosed primarily on microscopic study of nodular lesions of the extremities. Here, the individual lesion is usually smaller than in previously mentioned conditions, extremely painful, situated in the dermis, and breaks down comparatively early.

The microscopic picture is characterized by a polymorphonuclear infiltrate in the vessel walls,

with necrosis and aneurysmal formation of small vessels. The disease usually also involves the liver, kidneys, adrenal glands and brain. The temperature is usually elevated and evidence of involvement of these other organs can usually be found. There is often a leukopenia and usually an elevated sedimentation rate of the erythrocytes. The diagnosis is usually made at necropsy or by biopsy. This disease entity is believed to be an allergic response to a variety of toxins, of which in recent years the sulfonamides have been incriminated in many cases.

#### Erythema Nodosum

Erythema nodosum is a much more acute process, characterized by nodules usually on the anterior shins which are extremely painful and characteristically demonstrate a capital point of extreme tenderness. The term, as used in this country, refers to an acute disease in which is seen malaise, fever, arthralgia and aching of the legs associated with the characteristic nodules. The condition is usually associated with acute sore



throat or other streptococcic infection and is considered to be one of the rheumatic skin afflictions.

Microscopically the lesions show an infiltration about the vascular network in the upper and mid cutis. The infiltrate is largely made up of lymphocytes and polymorphonuclear leukocytes. The walls of the vessels are edematous and at times show some hemorrhage; however, necrosis or aneurysmal dilatation is not seen. This disease is usually self-limited and runs a course of ten days to two or three weeks, and rarely lasts longer than six weeks. Recurrences are very rare. Chronic erythema nodosum probably should be reclassified as nodular vasculitis or erythema induratum.

A syndrome similar to erythema nodosum is seen in the course of several infectious diseases and is here classed as symptomatic erythema nodosum.

### Erythema Nodosum, Symptomatic

Symptomatic erythema nodosum in tuberculosis occurs in young people, ten to eighteen years of age, and is associated with or just follows the primary tuberculous complex. These patients show a negative tuberculin test early in the disease, becoming positive during or following the nodular episode.

In symptomatic erythema nodosum in coccidiomycosis, the nodules develop shortly after an episode of "valley fever." The coccidioidin skin test becomes positive during or after the nodular episode.

Leprous erythema nodosum is seen during the periods of activity usually in lepromatous leprosy and is associated with neuritis, arthritis, et cetera.

The exanthemata may at times show an episode of nodular lesions. These are seen in diphtheria and measles especially.

Certain drugs may produce an erythema nodosum-like picture as the manifestation of dermatitis medicamentosa. Notable among these drugs are the sulfonamides, iodides and bromides.

### Pernio and Erythrocyanosis

These conditions are characterized by dusky, chronically inflamed nodules of the extremities which have a definite predilection for bony prominences and over the achilles tendon. The history is characterized by seasonal recurrence in cold weather, and they are a frequent sequel of frostbite.

Microscopically vascular and chronic inflamma-



Fig. 7. Nodular non-suppurative panniculitis, showing the characteristic depressions of the skin on healing of the nodules.

tory changes as described above may be seen; however, the diagnosis can usually be made on the seasonal history and the areas of predilection.

### Recurrent Idiopathic Thrombophlebitis

Recurrent idiopathic thrombophlebitis usually occurs secondary to suppuration, varicose ulcers, et cetera. However, thrombophlebitis migrans or primary recurrent thrombophlebitis may simulate many of the above conditions. However, the nodules usually occur in crops on the legs or elsewhere. These crops usually involute in a week or two. Larger vessels are usually involved, and there is a tendency to extend to larger and larger vessels. Microscopically the inflammatory reaction is mild and banal in type, but the veins show definite thrombosis.

### Summary

A group of nodular diseases of the extremities is discussed in which the clinical picture is often similar. In most the microscopic picture is characterized by vasculitis, a chronic inflammatory reaction of the dermis and panniculus, and in the more chronic cases a tuberculoid architecture is often seen.

Here, we have a group of diseases in which our time-honored classifications on "naked eye appearance" and on pathologic study do not com-

(Continued on Page 646)

# Detroit Physiological Society

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Session of February, 1949

## Variations of Breathing in the Newborn Infant In Low and High Oxygen Concentration

Philip J. Howard and A. Robert Bauer,  
Henry Ford Hospital, Detroit

The breathing of newborn infants has been known to be somewhat irregular in rhythm, rate and depth. The present study is a quantitative record of normal sleeping respiration, and its variation in atmosphere of 12 per cent oxygen, 80 per cent oxygen, and 5 per cent carbon dioxide in 95 per cent oxygen. An infant body plethysmograph has been used with a Krogh spirometer attached in such manner as to give constant breathing records. The individual motion of the chest or intercostal breathing, and of the abdomen, or diaphragmatic breathing have also been analyzed.

Observation in air showed rates of 32 to 67, averaging 46 per minute. Minute volume in air varied from 413 to 1,040, averaging 731 cubic centimeters. The average tidal air was 16.5 cubic centimeters with variation from 6.9 to 28.8 cubic centimeters.

Observations in low oxygen atmosphere of 11.75 per cent to 12.5 per cent oxygen showed rates of 24 to 70, averaging 44 per minute. Minute volume varied from 401 to 1,138, averaging 792 cubic centimeters. Tidal air varied from 9 to 36, averaging 18 cubic centimeters.

Observations in high oxygen atmosphere of 78 to 80 per cent oxygen showed rates of 22 to 94, averaging 53 per minute. Minute volume varied from 459 to 1,867, averaging 993 cubic centimeters. The tidal air was from 7 to 31, averaging 20 cubic centimeters.

Observations in 5 per cent carbon dioxide in 95 per cent oxygen showed rates of 32 to 70, averaging 51. The minute volume was 1,110 to 2,158, averaging 1,660 cubic centimeters. The tidal air was 23 to 47, averaging 33 cubic centimeters.

The relatively weak thoracic development often gives little positive support to inspiration. If the intercostal muscle system works well, giving posi-

tive support to inspiration, the chest and abdomen will expand together giving a positive phase. If the chest muscles, on the other hand, are negative, not offering help, the chest will contract with inspiration, giving a negative phase. Both positive and negative phase were seen often, frequently in the same infant. The phase seems to depend on muscular, bony and cartilaginous development of the thoracic region.

Types of sleeping inspiration in the newborn have been classified as follows: Type I: Cheyne-Stokes rhythm with gross irregularity. Type II: Cheyne-Stokes rhythm with apnoea. Type III: Periodic rhythm with no apnoea. Type IV: Regular with occasional short breath (most common). Type V: Stimulated, excessive as seen with carbon dioxide stimulation.

Observation of the exact percentage of oxygen needed for maximal stimulation indicates that 75 per cent oxygen is more of a stimulant in the newborn than 35 per cent oxygen.

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Howard, Philip J., and Bauer, A. Robert: The irregularities of breathing in the newborn period. *Am. J. Dis. Child.* (In press).

## The Causes and General Nature of Transverse Presentation of the Human Fetus in the Last Ten Weeks of Pregnancy

Charles S. Stevenson, Wayne University  
Collège of Medicine, Detroit

The study here presented consists of a series of fifty-two pregnant women in which transverse or oblique fetal presentation was found in the last ten weeks of pregnancy. Soft-tissue x-ray placen-tographic and cystographic studies of these cases revealed that 26.8 per cent had placenta previa. Another 17.4 per cent had very low implanted placentas—almost, but not quite, a marginal previa type of implantation. In 25 per cent of the cases the placenta lay wholly in the fundus of the uterus, and in another 23.2 per cent it was implanted mostly or partly in the fundus. In only 7.6 per



cent of the series was the placenta found to lie chiefly in the uterine body proper.

These figures are far from normal since in large groups of pregnant women selected at random and without regard to fetal presentation the placenta is generally implanted in the uterine body proper in 84.2 per cent; only 1 per cent have placenta previa and there is an incidence of only 14.8 per cent for complete and partial fundal implantation.

It is thus evident that placental implantation in either pole of the uterus is a prime causal factor in transverse presentation of the fetus. A higher than average degree of multiparity (3.62 in this series), with its additional relaxation of the uterus from previous gravid enlargements and its relaxation of the abdominal musculature on the basis, was the next most important cause in this series, and it was found to be a necessary one in fundal placental implantations.

#### Concentration of Ac-Globulin in Various Species

Robert C. Murphy, Wayne University  
College of Medicine, Detroit

Recent investigations in this laboratory have indicated the existence of a factor which accelerates the activation of prothrombin to thrombin. This factor has been termed Ac-globulin and has been shown to exist in two forms, plasma Ac-globulin and serum Ac-globulin. This paper deals primarily with the concentrations of this factor in the plasma of selected species. Analyses have shown that the Ac-globulin concentration expressed as units per cubic centimeter in the plasma of the species studied is as follows: man 12 to 17, dog 150 to 200, cat 130 to 170, rabbit 150 to 300 and guinea pig 30 to 40. Prothrombin concentration in the same plasmas was also studied and the results were shown to compare favorably with those originally reported by Warner, Brinkhous and Smith. Serum Ac-globulin is shown to be unstable in man and dog and relatively stable in rabbit and cow. The reason for the instability is not yet apparent. A new concept is suggested, namely, the importance of the ratio of prothrombin to Ac-globulin which may be of particular significance in man where the ratio of prothrombin to Ac-globulin concentration is the greatest of the species studied.

#### INSANITY HEARINGS

(Continued from Page 576)

circumstances must be directly and personally known to the examining physician.

2. Physicians' certificates for the commitment of the feeble-minded person should follow the same outline as certificates of insanity, the physician being careful not to depend upon the result of such scientific tests as the I.Q. test.

3. If judgment and reasoning are defective, the physician must explain fully how he arrived at such conclusion.

4. Delusion and hallucinations, if present, must be described.

5. Bizarre behavior must be described.

6. If the physician believes it both improper and unsafe for the patient to appear in court, he should so state in his certificate, giving reasons why it would be both improper and unsafe for the patient to appear in court.

#### TETRAETHYLAMMONIUM CHLORIDE

(Continued from Page 596)

nium ions demonstrated marked sensitization with resultant dramatic vasoconstriction, apparent cardiac and respiratory arrest, with a severe disturbance of cardiac rhythm of a temporary nature. This experience, together with the observation of Page and Taylor,<sup>5</sup> would indicate the inadvisability of administering adrenalin intravenously after the injection of tetraethylammonium.

4. Eleven of sixteen patients with cardiovascular disease showed an elevation of pulse rate of less than 10 per minute in spite of marked drop in systolic and diastolic blood pressure. In two cases, actual slowing of the heart rate was noted.

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## Michigan's Foremost Family Physician

This number of THE JOURNAL is dedicated to Michigan's Foremost Family Physician, J. S. DeTar, M.D., of Milan.

There are many other doctors of our state equally deserving of the same recognition. By far the great majority of us do have an intense absorbing interest in the medical welfare of our patients. We do keep up with the latest scientific developments of our rapidly advancing science by attendance at our continued postgraduate education courses. This increased knowledge we use for the direct benefit of our patients. Most of us, as individuals, are loved and respected by our patients.

In addition to this scientific interest in our patients, many of us devote much time and effort to the non-medical problems of our people. We are a part of the community we live in, assuming leadership in civic activities, service clubs, church organizations, the Chamber of Commerce, Boy and Girl Scout groups, in our schools and educational organizations, veterans' groups, and in many other lay activities. Concern about legislative acts and their effect upon the health of our people is one of our most important duties. For instance, since January 1, of this year, Dr. DeTar gave twenty-six talks to lay and professional gatherings, pointing out the great advances of modern medicine and the possible impact of proposed social legislation. We, as a profession, are constantly striving to make our community the best place in the world in which to live.

Dr. DeTar is outstanding in all these activities, and his deserved selection for this honor makes him a symbol of the unselfish devotion which the medical profession has for the general welfare and betterment of the people of our state.

*E. P. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



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# Editorial

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## DOCTORS FOR THE ARMED FORCES

BY THE END of June, practically all of the doctors of medicine who as part of their military service were sent to medical school, graduated, and who were then required to give two years of active service in a peace-time army, will have received their discharge from the army, the navy or the air forces. The military must have more doctors, but the young doctors are not volunteering for commissions. The military is seriously considering the necessity of drafting doctors of medicine and dentistry, at which time the pool of about 4,000 who were trained under government expense and another 4,000 who were exempted from military service to continue courses already started, will be taken first. There is also a large group, estimated at around 7,000 of young doctors exempted from service during the war because of being classified as essential. This makes a considerable group of doctors upon which to draw.

The military does not want a draft. The medical profession very strongly opposes a draft of its members—yet we must face the necessity of supplying medical service to our armed forces.

There are several reasons why doctors do not wish military service and it seems to us all these could be corrected. In the first place, the work these doctors are doing is far from the complete practice of medicine. Many of them are serving with troops, hold sick calls, dispense pills, render first aid in accidents, visit the wives and children of the personnel, but if anybody is really sick they must be sent to the hospital. That is not a very interesting prospect for a young doctor. Also the young doctor is a lieutenant. After a considerable period of time he may become a captain. He may be anything up to thirty-five or more years of age. He has had a brilliant education, with seven or eight college years. Every young man now being graduated in medicine, or for many years, has an education the equivalent of the doctor of philosophy of the educational profession. He is a highly cultured man. In the army, he may be a lieutenant or captain, addressed as such, and he often has younger officers over him in rank—majors, lieutenant-colonels and colonels. We wish to make two

specific suggestions which we think the military forces might well consider:

1. Unite the medical personnel of all the armed forces into one corp, who would service any member of any force, and make the hospitals available to any of these forces. In other words, in the medical department, completely consolidate the medical force into one complete group. Dress them as officers, but eliminate the emblems of rank. Let their title be "Doctor." With proper designation—junior, senior, chief, et cetera—they would never be subordinate to laymen in rank, except for command purposes only. They never have to act as officers of the day or other military functions.

2. These men are doctors of medicine entitled to the same living standards as other doctors of medicine. Make their pay compare with what other doctors earn—not the top-notchers, but the average.

We believe if the military would do these things, and also would allow postgraduation training, that the difficulty in getting doctors for the armed forces would be very much reduced. The doctors in the army now get \$1,200 a year more than other officers of equal grade. Doctors assigned to troops have quite restricted activities if they accept their duties as perfunctory.

Basically some 4,000 young men became doctors at government expense. Now they are unwilling to contribute something of service and real value in return.

## VOLUNTARY HEALTH INSURANCE PLAN —S1456

ALABAMA'S Senior Senator Lister Hill, of the Hill-Burton Law, whose father was the late L. L. Hill, a Montgomery surgeon, for himself and Senators O'Connor of Maryland, Withers of Kentucky, Aiken of Vermont, and Morse of Oregon, on March 30, 1949, introduced a bill in the Senate "to authorize grants to the States to survey, co-ordinate, supplement, and strengthen their existing health resources so that hospital and medical care may be obtained by all persons."

This bill is an amendment to the Hill-Burton

Act by adding the title "Section 701." The purpose of this title is to make a high quality of hospital and medical care available to all persons in each State by (a) strengthening and co-ordinating existing health resources within the State, (b) encouraging and stimulating voluntary enrollment in prepayment plans for hospital and medical care with emphasis on employer participation and on making such protection available to persons in rural areas, and (c) providing protection to persons financially unable to pay all or part of subscription charges for prepayment of hospital and medical care.

This bill is, at this writing, not yet in print, but we have read a carbon copy and the AP analysis given elsewhere (page 544) is quite complete and accurate. We believe this bill is one the medical profession might well endorse, because it offers the public some definite aid in the problem of general health care. This bill contains many of the good features of the Taft bill of the previous Congress, and that was drafted through conferences with medical men generally.

This bill covers many of the "AMA twelve points," and is an aggressive, positive step to preserve the present private practice. It interferes in no sense of the word but assures for everyone, no matter what the state of his financial security, an opportunity to provide for his health care by voluntary budgeting or prepayment.

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NOTE—This bill was written with the ten points of President Gilson Colby Engel, M.D., of the Medical Society of the State of Pennsylvania as a guide.

## NATIONAL HEALTH

WHEN a great public service corporation finds that its services are being more and more demanded, and it must possibly enter somewhat new fields to supply that service, there is only one thing that can be done. More capital must be secured, and time and effort put forth endeavoring to fulfill the obligations assumed by being a public service corporation. There is nothing strange in that statement, and all such organizations must meet the demand or retrogress. Such is life and such is the spirit of American, individualized business.

When a call comes for more and better health services, the obligation is there and the remedy is the same. The medical profession and the hospitals of the nation are, in the aggregate, a huge public service corporation. Demands have been

growing for years for more and better distribution of health service. That demand has been met in part. We have produced more and better trained doctors—the best in the world—and we have organized and built magnificent and efficient hospitals capable of rendering the highest, most modern, and most efficient care to the ill; also unexcelled places to make diagnoses.

But the demand still grows. We must do more. Foreseeing a social problem, the medical profession and the hospitals established the Blue Shield and the Blue Cross to equalize the load and make the burden easier by offering prepaid care. This has been overwhelmingly successful. The major illnesses can be budgeted, both hospital and medical or surgical.

Our public service group has now reached the expansion point and must have help in the matter of "more capital, more time, and more effort." This is where government, if it wishes to really help, can do a good job. Research should be subsidized, general hospitals might be built or enlarged where most needed. The better distribution of medical care, the budgeting or prepayment could be helped by judicious aid where it is needed. Prepaid care is available through our well-established, non-profit plans, and more of those plans should be encouraged. Most important of all is to bear in mind that our great country was built by individual self-esteem, by self-sufficiency, by independent action, and by the ever present obligation to aid the unfortunate or the needy.

## GOOD PUBLICITY—AND BAD

THE PUBLIC is beginning to hear about socialized medicine. We have had numerous editorials in the public press which have done our cause an immense amount of good. We have had some which were questionable. We have had some which told the unvarnished truth, but which probably might better not have been told. These all were an honest effort to bring before the public the question of socialized medicine and the growing tendency toward the socialized state. We are grateful for these efforts.

It is not necessary to mention all these articles by name, but our members have read them and appreciate the good intentions. General Hawley spoke to the Detroit Economic Club in March. He had a large and very enthusiastic audience and the Michigan newspapers, especially the *Free Press*,



had very favorable editorial comments. The *Milwaukee Journal* has had a number of articles on socialized medicine, helping along the cause of independent practice of medicine and of opposition to the paternalistic program being urged upon us.

*The Nation's Business* for March contains a very enlightening article on "Patients Dilemma" by Greer Williams. This article quotes both General Hawley and Jay Ketchum at great length. It covers about four pages and is well worth reading.

Radio commentators are paying their respects to us—many on the favorable side, but some distinctly antagonistic. On the morning of March 24, Martin Agronski commented at length upon some doctor from the south, place not mentioned and name not mentioned, who had scheduled a series of lectures. These lectures had been canceled at the last minute by one of the universities because of this doctor's action in refusing publicly to pay the \$25.00 levied by the AMA upon its members. The AMA was severely criticized. This is a sample of bad publicity to which there is no possible reply. We strongly suspect this particular item was inspired by those who wish to place the medical profession in a bad light. We question the accuracy of the statement as being a policy with any degree of authority. The AMA has publicly announced that this assessment is a voluntary affair and that there will be no penalties if a member feels that he cannot or should not pay. Mr. Agronski could have found that information before he made his comment because these facts have been publicized and broadcast.

We are grateful to our friends for helping in this campaign. We are sorry that some persons are taking an active interest in the campaign without studying both sides. Such statements as Mr. Agronski's, which are heard by literally millions every morning, without refutation and with almost daily repetition are hard to overcome.

## THE AMA TWELVE-POINT PROGRAM

THE TWELVE-POINT program announced by the American Medical Association in its fight against socialized medicine was published in our March issue. We are repeating it in this issue. We thoroughly indorse every point made and we in Michigan are proud to present these points.

In 1945, Michigan entertained the president and president-elect of seventeen eastern and mid-western state medical societies in Detroit. We met on

April 26 and 27, and made our proposal at that time for fighting the specter of socialized medicine which was looming very large. We presented the group with a set of principles for legislative action for the benefit of the people, to which medical men could agree. We demonstrated to these eminent guests our Michigan Medical Service and Michigan Hospital Service plans in operation, occupying at that time eleven floors of the Washington Boulevard Building with over 500 employees. It was already a very effective voluntary medical and hospital service program. These doctors were invited, when they returned to their homes, to consult with their own societies and propose a set of principals which could be co-ordinated with those from Michigan and establish a national program.

Two months later, five representatives from the Michigan State Medical Society visited Colorado, where representatives of ten western states were invited to join this same program. Many of these states sent in constructive ideas. We have just been looking these over and are much impressed with the direct and aggressive thinking of these medical men four years ago. All suggestions made were consolidated into a set of principles which were adopted by the first Conference of President and Executive Officers of State Medical Societies, which first met in Chicago, December 2, 1945. The principles adopted at that time were published with a heading "Proposals for Legislative Action." This was a positive program and an aggressive one for the benefit of the people. After careful re-reading, we find that every point of the present twelve-point program of the AMA was suggested in that Michigan inspired program of December 2, 1945.

The fight against socialized medicine has been a long, up-hill fight. It started from the grass roots but now has become national in scope. We would like to suggest that the AMA add one more item to the effect that its twelve-point program is a suggestion for *legislative action* which we can support in place of the present proposed plan of the federal government. Any program that will be a success in our fight against socialized medicine must be aggressive, must offer something to the people that they will like better than the sugar-coated plum of the New Dealers and the Socializers. The ten points of President Engel, president of the Pennsylvania society, contain the same basic principles, worded differently. The principles must be essentially the same for they are fundamentally

(Continued on Page 620)

# Program of The American Medical Association

## *The Advancement of Medicine and Public Health*

### A Federal Department of Health

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine, and the co-ordination and integration of all Federal health activities under this Department, except for the military activities of the medical services of the armed forces.

### Medical Research

2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.

### Voluntary Insurance for the Care of the Indigent

3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas. Aid through the states to the indigent and medically indigent by the utilization of voluntary hospital and medical care plans with local administration and local determination of needs.

### Medical Care Authority with Consumer Representation

4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.

### New Facilities

5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas in which the need can be shown and with local administration and control as provided by the National Hospital Survey and Construction Act or by suitable private agencies.

### Public Health

6. Establishment of local public health units and services and incorporation in health centers and local public health units of such services as communicable disease control, vital statistics, environmental sanitation, control of venereal diseases, maternal and child hygiene and public health laboratory services. Remuneration of health officials commensurate with their responsibility.

### Mental Hygiene

7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.

### Health Education

8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.

### Chronic Diseases and the Aged

9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.

### Veterans' Medical Care

10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care, including care of the veteran in his own community by a physician of his own choice.

### Industrial Medicine

11. Greater emphasis on the program of industrial medicine, with increased safeguards against industrial hazards and prevention of accidents occurring on the highway, home and on the farm.

### Medical Education and Personnel

12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.



# John Sherrod DeTar, M.D.

## Michigan's Foremost Family Physician of 1948

Editor's Note: The Council of the Michigan Medical Society, at its annual session in 1947, created the "Michigan's Foremost Family Physician Award." This award is presented annually to the Michigan Doctor of Medicine judged to have given the most outstanding service to his community and in general practice and who is nominated by the Michigan State Medical Society for the AMA General Practice Medal.

The initial recipient of this Michigan award was Thomas Edward DeGurse, M.D., of Marine City. The 1948 award was made by President E. F. Sladek, M.D., to John Sherrod DeTar, M.D., Milan, Michigan, on March 23, 1949.

This is a biography of John S. DeTar, M.D., Milan, Michigan.

It is also the story of a man who, in his person and in his achievements, symbolizes American medicine.

You will not find perfection in this biography.

You will find a doctor who lives this philosophy.

Do what thy manhood bids thee do,  
From none but self expect applause;  
He noblest lives and noblest dies  
Who makes and keeps his self-made laws

Let us look at this man.

### Parentage

His father, John A. DeTar, was a salesman by profession. His mother, a graduate of the University of Michigan, was a reporter on the *Detroit Journal*.\* Both parents were religiously inclined and were members of the Disciples of Christ Church, in which the father served as a Deacon.

John was born in Detroit in 1902. In 1906 his mother died from injuries sustained in a fall. His father continued the task of raising a family of two boys and two girls, of which John was number three. The father was never prosperous in terms of money, but he can be proud of his family, for they have each become successful in their separate fields. John's younger brother, Vernon, is now Head of the Organ Teaching Department of the Julliard School of Music, New York City, and his sister, Lelia Margaret, is an outstanding teacher in Boston. Another sister, Annabel, is happily married and is living in Los Angeles, California.

### Early Years

With almost storybook overtones, young John DeTar began work at the age of nine as a newsboy selling the *Detroit Journal* on the streets of Detroit. He attended Tilden grade school and

Central High School. Saturday nights he aided in assembling the Sunday paper, working all night, but Sunday morning found him playing the violin for the Sunday school class.

High school and college offered opportunities for leadership. John was President of his Hi-Y Club, a varsity swimmer, a boys' counselor at the Y.M.C.A. camp, in 1919 President of the Student Club at Detroit Junior College, and two years later at the University of Michigan he was a member of the Deputation Team which conducted Sunday services, and was Financial Chairman of the Student Christian Association which raised the unequaled amount of \$5,000 for young peoples' Christian activity.

### Pre-Medicine

In 1924, John had married his childhood sweetheart, Claudia Hensley, and they were greeted in 1925 with a baby son. John continued in college, but in 1923 changed his mind about becoming a medical missionary as he had been planning. He settled for a Bachelor of Science degree and started looking for work in June, 1924. He found it as a door-to-door salesman for the Realsilk Hosiery Company. Six months later, at the age of twenty-three, he was permanently established as the manager of an eleven county district, commanding thirty-one salesmen and a weekly income of \$100.

But it wasn't enough. An inner satisfaction was lacking. John resigned and returned to Detroit. He entered the real estate business. Again he was financially successful as a member of the Homer Warren Real Estate Company.

But John wanted to be a Doctor of Medicine. He was sure of that now.

He resigned in September, 1928, and entered the Detroit College of Medicine. To support his family he worked nights at the Briggs Body Plant

\*Now the *Detroit Free Press*.

as a first aid man. The man-killing schedule of work and study was:

6:00 p.m. to 7:00 a.m. Work at Briggs  
7:00 a.m. to 8:00 a.m. Breakfast  
8:00 a.m. to 5:00 p.m. Medical School  
5:00 p.m. to 6:00 p.m. Dinner

and experience to see needs which existed and attempt their solution, he devoted himself to community service.

High points in his record of community service include the following:



Here is the usual scene in the busy office of this very busy country doctor.

Sleep was a luxury obtained on the job at every opportunity. The coveted M.D. degree was won in 1930, and he interned in 1931 at Henry Ford Hospital, Detroit.

That is when Doctor DeTar's life began. Locating in Milan in 1931, he planned to spend a few years recuperating physically and financially and then take additional training to specialize in Pediatrics.

But he had found his work. The task of being a family doctor gave him the satisfaction of serving, which he had sought. He is still a general practitioner in this small town of 2,500 population. He has never failed to answer a call for his services, and his successful medical work under difficulties reads, as does that of most rural doctors, like a medical "Grimm's Fairy Tale."

Yet, there were other responsibilities. As the man in the community most qualified by education

- Gives generously of his medical services regardless of person, time, distance, or remuneration.
- Obtained library for Milan: First President.
- Organized Milan Boy's Club (90 members) to combat juvenile delinquency.
- Organized Milan Recreation Council. Started first summer recreation program in Milan.
- Organized 15 hobby clubs (200 members) to combat idleness during depression.
- Organized Milan Community Council: First President. Forerunner of such councils in the smaller communities of Michigan. Serves as model.
- Headed successful fight to establish the Washtenaw County Health Department.
- Organized Milan Veteran's Council during war to welcome soldiers home, help them find jobs and places to live.
- Serves as team physician for Milan High Schools athletic teams.
- One of organizers of Rotary Club in Milan.
- Helped organize Wolverine Plastic Corporation, now third largest industry in Milan.
- Leading drive to promote complete coverage of Milan people (as well as all of Michigan) by Blue Cross Voluntary Health Insurance Plan.
- Raised money and developed life-saving facilities at twenty stations around Torch Lake (Doctor's summer vacation land).

Photographs, courtesy *The Toledo Blade*.



Yet, it is significant that in spite of importunities to do so, *he has never run for any office in the community.* His concept has always been that others carry on the appurtenances of officialdom:



Noontime finds Doctor DeTar with one of the many civic organizations to which he belongs. Here he is addressing the Rotary Club, of which he is a charter member.



Lamplight, a Health Department nurse and Doctor DeTar minister to the needs of a four-day child.

It is his duty to diagnose the community "illness" and implement proper treatment.

#### Medical Organization

With a second-to-none community and medical service record, with the responsibility of raising four children—John H., 1925; Jean, 1927; David,

1932; and Mary, 1936—well in hand, Doctor DeTar was pushed forward by his professional colleagues as a man with ideas and energy to serve in organizational work of the medical profession.

His activity has been irresistible in its forward march. He was named President of the Washtenaw County Medical Society, then Delegate to the Michigan State Medical Society House of Delegates. He developed the present Public Relations program of the MSMS during his three-year term as Chairman of the Public Relations Committee. He was made Vice Speaker of the House of Delegates of the Michigan State Medical Society, then Speaker, and again Speaker. As a



It's six o'clock in the morning as a balding, pajamaed country doctor, John DeTar, answers a call from one of the 2,500 residents of Milan, Michigan, his home town.

member of The Council of the MSMS and its Executive Committee, he has been in the forefront of activities looking toward increased medical service by the medical profession. With his heart in the voluntary group prepaid Medical Service plans, he was made a member of the Board of Michigan Medical Service, placed on its Executive Committee, and made a chairman of the Enrollment Committee. Enrollment increased to top the million mark. He was a prime mover in the development of the Michigan Rural Health Conference and in the reorganization of the Michigan Health Council with its constituent Community Health Councils.

He is driving ahead—just as is American medicine.

## Medical Record

### Medical Education

1919-1921 Pre-Medical—Detroit Junior College  
1921-1933 Medical School—University of Michigan  
1923-1924 B.S. Degree—University of Michigan  
1928-1930 M.D. Degree—Detroit College of Medicine  
(Now Wayne University College of Medicine)

### Internship

Henry Ford Hospital, Detroit, Michigan, 1930-1931

### Postgraduate Work

Fellow in Postgraduate Work of the Michigan State Medical Society; Regular attendant at University of Michigan Postgraduate Clinics.



Daughter Mary plays the piano, wife Claudia sings, and the doctor plays the violin, as the "country doctor" steals an evening away from his busy life as "Michigan's Foremost Family Physician."

### Medical Affiliations

Member and Past President of Washtenaw County Medical Society; Speaker of the House of Delegates of the Michigan State Medical Society; member, Phi Rho Sigma Medical Fraternity; member, Michigan Foundation for Medical and Health Education; Fellow, American Medical Association; member, Wayne County Academy of General Practice.

### The DeTar Legend

Here are three stories about Dr. DeTar, typical of those that spring up wherever he goes.

#### *Willow Run's Health Pioneered by One Doctor.*

World War II was on the horizon. Washtenaw County, in which the town of Milan is located, had no Health Department.

The Washtenaw County Medical Society felt

that a County Health Department was a vital necessity, and instructed its newly elected President, Doctor DeTar, to take steps to get one. The County Board of Supervisors—the governing body of the



Guarding the health of a man who guards the health of others is the chore that falls to the physician's wife, Mrs. Claudia DeTar, who here reminds her husband to take along his galoshes.

County—refused flatly. A Health Department wasn't needed; it would cost too much.

Persuasion failing, Doctor DeTar led a two-year fight by organizing and chairmanning the Washtenaw County Citizens Committee for a Health Department. He raised campaign money at public rallies. In one thirty-day period, he made sixty speeches and raised \$1,500 through donations of "a quarter apiece" from his listeners. He changed the membership of the Board of Supervisors, and, after twenty-four months, obtained a County Health Department that is now one of the finest in the country.

War came. Willow Run, the great aircraft manufacturing plant, was built; the Washtenaw County Health Department was a prime factor in protecting the lives of thousands of workers—thanks to the foresight of Doctor DeTar, the family doctor.

(Continued on Page 642)



# PRELIMINARY OUTLINE OF 1949 GENERAL ASSEMBLY SPEAKERS

84th Annual Session, Michigan State Medical Society

Grand Rapids, September, 1949

Time	Wednesday September 21, 1949	Thursday September 22, 1949	Friday September 23, 1949
8:30-9:00 a.m.	Registration Exhibits open	Registration Exhibits open	Registration Exhibits open
9:00-9:30 a.m.	<b>SURGERY</b> Dallas B. Phemister Chicago, Illinois	<b>GYNECOLOGY</b> Frederick H. Falls Chicago, Illinois	<b>MEDICINE</b> William B. Castle Boston, Mass.
9:30-10:00 a.m.	<b>MEDICINE</b> Arthur R. Colwell Evanston, Ill.	<b>OTOLARYNGOLOGY</b> Ralph J. McQuiston Indianapolis, Indiana	<b>SYPHILOLOGY</b> Joseph E. Moore Baltimore, Md.
10:00-11:00 a.m.	Intermission to View Exhibits	Intermission to View Exhibits	Intermission to View Exhibits
11:00-11:30 a.m.	<b>ANESTHESIA</b> John S. Lundy Rochester, Minn.	<b>PEDIATRICS</b> Herbert C. Miller Kansas City, Kansas	<b>GENERAL PRACTICE</b> Harry E. Bacon Philadelphia, Pa.
11:30 a.m.-12:00 noon	<b>DERMATOLOGY</b> Earl D. Osborne Buffalo, N. Y.	<b>PUBLIC HEALTH &amp; PREVENTIVE MEDICINE</b> John E. Gordon Cambridge, Massachusetts	<b>NERVOUS &amp; MENTAL DISEASES</b> Franklin G. Ebaugh Denver, Colo.
12:15-1:30 p.m.	4 Section Meetings <b>DERM. &amp; SYPH.</b> Earl D. Osborne Buffalo, N. Y. <b>ANESTHESIA</b> John S. Lundy Rochester, Minn. <b>UROLOGY</b> Edwin Davis Omaha, Nebraska <b>GYN. &amp; OB.</b> Joseph L. Baer Chicago, Ill.	5 Section Meetings <b>PEDIATRICS</b> Herbert C. Miller Kansas City, Kansas <b>SURGERY</b> Max Thorek Chicago, Illinois <b>OTOLARYNGOLOGY</b> Ralph J. McQuiston Indianapolis, Indiana <b>OPHTHALMOLOGY</b> Ralph O. Rychener Memphis, Tenn. <b>PUBLIC HEALTH</b> John E. Gordon Cambridge, Massachusetts	4 Section Meetings <b>MEDICINE</b> John P. Peters New Haven, Conn. <b>GENERAL PRACTICE</b> Harry E. Bacon Philadelphia, Pa. <b>NERVOUS &amp; MENTAL DISEASES</b> Leonard E. Himler Ann Arbor, Mich. <b>RADIOLOGY</b> Ursus V. Portmann Cleveland, Ohio
1:30-2:00 p.m.	<b>OBSTETRICS</b> Joseph L. Baer Chicago, Ill.	<b>SURGERY</b> Robert M. Zollinger Columbus, Ohio	<b>SURGERY</b> Arnold S. Jackson Madison, Wisc.
2:00-2:30 p.m.	<b>UROLOGY</b> Edwin Davis Omaha, Neb.	<b>MEDICINE</b> Edward C. Reifenstein, Jr. Syracuse, N. Y.	<b>PEDIATRICS</b> Robert L. Jackson Iowa City, Iowa
2:30-3:00 p.m.	<b>PEDIATRICS</b> Warren E. Wheeler Columbus, Ohio	<b>OPHTHALMOLOGY</b> Ralph O. Rychener Memphis, Tenn.	<b>RADIOLOGY</b> Ursus V. Portmann Cleveland, Ohio
3:00-4:00 p.m.	Intermission to View Exhibits	Intermission to View Exhibits	Intermission to View Exhibits
4:00-4:30 p.m.	<b>GENERAL PRACTICE</b> Edith L. Potter Chicago, Ill.	<b>OBSTETRICS</b> William J. Dieckmann Chicago, Ill.	<b>SURGERY</b> Robert E. Gross Boston, Mass.
4:30-5:00 p.m.	<b>SURGERY</b> John M. Waugh Rochester, Minn.	<b>SURGERY</b> Max Thorek Chicago, Ill.	<b>MEDICINE</b> John P. Peters New Haven, Conn.
5:00-6:00 p.m.	Discussion Conferences	Discussion Conferences	Discussion Conferences
8:30-10:00 p.m.	Officers Night Biddle Lecture	10:30 p.m. State Society Night	End of General Assembly

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

.....



1. Murphy, F. D.: Treatment of Cardiovascular Emergencies in the Home, Wisconsin M. J. 42:769 (Aug.) 1943



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

A notice appearing in a recent issue of *THE JOURNAL* announced the availability of penicillin for the treatment of gonorrhea. The state and local health departments are now supplied with penicillin for distribution to private physicians for use in their own offices for the treatment of gonorrhea. Private physicians should request necessary supplies of penicillin from their local health department.

\* \* \*

A new manual "Food and Nutrition Facts for Health and Social Works" prepared by the Michigan Department of Health with the assistance of other agencies should reflect itself in improved nutritional status of the state.

Copies of the manual have been sent to members of the medical profession, nurses, social workers, home extension workers, dietitians, and others in related fields. Additional copies may be had from the Department.

\* \* \*

The services of hearing and vision consultants of the department are now being scheduled for the coming school year.

Those who are interested in having vision or hearing

conservation programs in their communities should contact their local health departments at this time so that requests for the services of the consultant may be asked.

\* \* \*

Gerald Bax of Holland, a graduate of Hope College, is the new business manager of the Michigan Rapid Treatment Center, Ann Arbor. Bax was previously business manager of the Ferguson-Droste Rectal Clinic and Hospital, Grand Rapids.

\* \* \*

Dr. A. B. Mitchell, formerly with the Division of Laboratories, Michigan Department of Health, became Director of the Shiawassee County Health Department effective April 1, 1949.

\* \* \*

"The Doctor Speaks His Mind," a new 15 mm. sound film dealing with cancer diagnosis and control, has been added to the Film Loan Library of the Michigan Department of Health. The film is planned primarily for showing to adult audiences when a physician can be present for discussion following the showing. Opening with a physician leaving the home of friend ill of cancer,

(Continued on Page 620)

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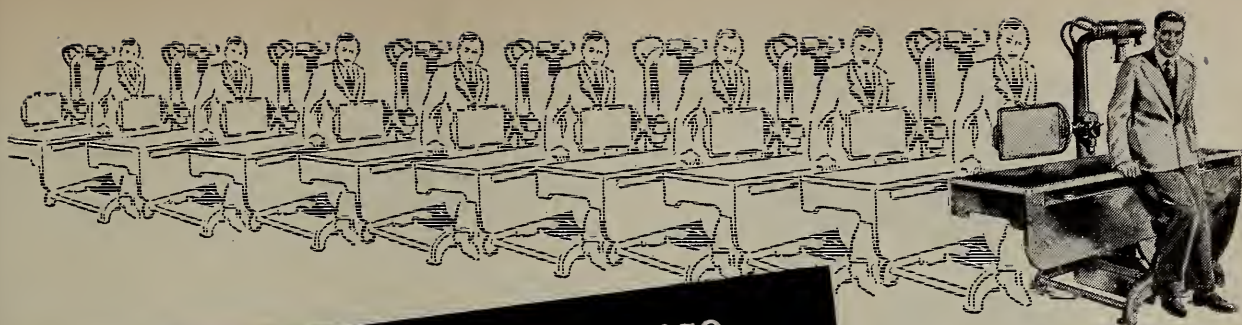
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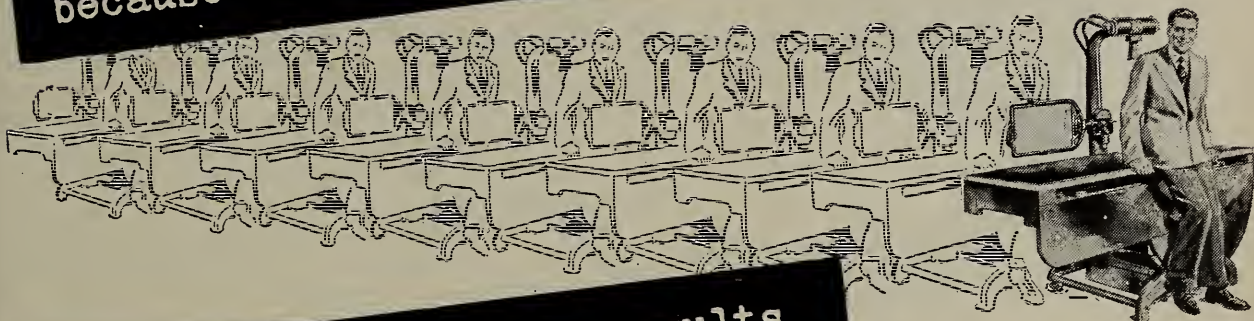
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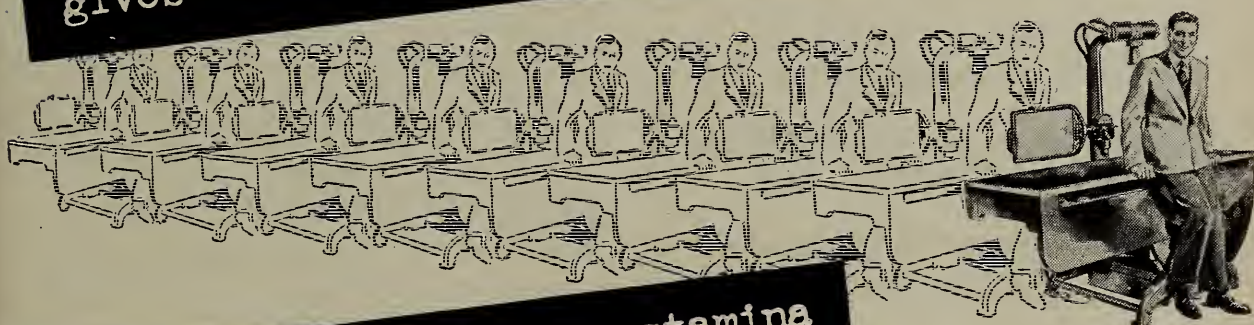
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(Continued from Page 618)

it includes the discussion of many cases of cancer known to the doctor—some known early, treated and cured, and others in which the diagnosis was late. It urges early examination and lists the seven signs of cancer.

\* \* \*

Public Health people from Israel, Poland, Denmark, Finland, Peru, Argentina, and Canada studied in the Department during March.

They included Dr. Jadwiga P. Dobrowolska, chief dentist in the national health service of Poland who studied in the Division of Public Health Dentistry; Drs. Kam Penttinen of the University of Helsinki, Finland and H. Bernkopf of the University of Jerusalem, Israel, who studied smallpox and general biologics production and distribution in the laboratories; Dr. Mario Leon who is to set up a new national bureau of epidemiology in Peru; Dr. Francisco J. Menchaca, who is making plans for the first school of public health in Argentina; Dr. K. Erik Hensen, professor of sanitary engineering, Technical University, Copenhagen, Denmark; and Lloyd Monkman, industrial health engineer of the Canadian National Health Service.

\* \* \*

### ISSUES WARNING

The Department, through press and radio, has warned Michigan people that even the smallest cut from glass of broken fluorescent lighting tubes should be treated by a physician who has been informed of the nature of the wound.

\* \* \*

### INCIDENCE OF CERTAIN REPORTABLE DISEASES

Disease	March, 1949	March, 1948
Diphtheria .....	3	17
Gonorrhea .....	745	791
Lobar pneumonia .....	124	86
Measles .....	3,192	8,014
Meningococcic meningitis .....	12	13
Pertussis .....	128	430
Poliomyelitis .....	9	3
Rheumatic fever .....	96	66
Scarlet fever .....	2,051	804
Syphilis .....	750	1,102
Tuberculosis .....	445	441
Typhoid fever .....	2	1
Undulant fever .....	22	26
Smallpox .....	1	0

### THE AMA TWELVE-POINT PROGRAM

(Continued from Page 610)

right and are what must be the National plan in the last analysis.

The program of four years ago, mentioned above, was the basis upon which the Taft Bill was written, and Senator Taft was glad to accept many of our suggestions at that time. We believe, and are confident, that our salvation not only as doctors but as independent, self-sufficient people, must be along these principles.

safe...rational...effective

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**overweight**



Harris, Ivy and Searle conclusively proved that 'Benzedrine' Sulfate safely depresses the overweight patient's appetite—and when caloric intake is sufficiently lowered, weight reduction is facilitated. After a comprehensive series of functional tests, these same investigators conclude: "No evidence of deleterious effects of the drug (amphetamine sulfate) were observed." (J.A.M.A. 134:1468, 1947).

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## Woman's Auxiliary

### NATIONAL CONVENTION

Last call for reservations for the 26th Annual Convention of the Woman's Auxiliary to the AMA, which will be held at Haddon Hall, Atlantic City, New Jersey, June 6-10, 1949. If you have not already done so, send your request for reservations *at once* to Robert A. Bradley, M.D., Chairman, 16 Central Pier, Atlantic City, N. J.

A most cordial invitation is extended to every auxiliary member, and wives of all members of the American Medical Association, who will be welcomed to the general sessions and all social functions.

B. DIXON, *President*

### ORGANIZATION

On December 15, 1948, Mrs. W. L. Dixon, President, Mrs. E. G. Upjohn, Director of Districts 5 and 11, and Mrs. Don R. Wright, President-Elect and Chairman of Organization, went to Benton Harbor to meet with the members of the Berrien County Medical Society and their wives, at which time the Medical Society invited their ladies to form an Auxiliary. Mrs. R. C. Conybeare entertained the women at luncheon in her home on April 2, at which time the organization was completed. They met on April 19 with the Berrien County Medical Society for their first formal session.

Mrs. W. L. Dixon and Mrs. Fred Brace of Grand Rapids met with a group of doctors' wives in Muskegon on December 3, 1948, and aided them in the organization of an Auxiliary there. We are indeed glad to welcome these two new auxiliaries into the state organization.

Plans are formulating for two more auxiliaries in the Upper Peninsula, requests having come from Chippewa-Mackinaw County, Luce County, and Marquette-Alger County Societies for assistance in organization. Mrs. E. G. Upjohn reports she has been in correspondence with Cass County in regard to forming an auxiliary there, and the Iona-Montcalm doctors' wives have expressed the intention of organizing in the near future.

BERNICE WRIGHT, *Organization Chairman*

### SOCIALIZED MEDICINE

Mrs. R. M. Leitch, President of the Branch County Medical Auxiliary, spoke before the assembled members of the Matteson and Union City Farm Bureaus on March 21, her topic being "Socialized Medicine." Mrs. Leitch worked in England for a time after socialized medicine came into being and had an opportunity to observe it in practice.

"Doctors' offices were jammed, the doctor would appear at the door of his crowded waiting room and say, 'All those with colds come into my office.' The group would walk in, all receive the same medicine, with no private consultation, no other symptoms checked, and be on their way. The next group so treated might

*(Continued on Page 640)*

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Rexair takes dust from carpets, bare floors, drapes, upholstered furniture, and from the air itself. Rexair collects dust and dirt in a water bath; discharges cleaner and moistened air back into the room.

The longer Rexair runs, the cleaner and fresher the air becomes. Rexair has no porous bag from which dust can escape back into the air you breathe. Dust is permanently trapped in water. You pour the water down the drain—dust and dirt go with it.

Illustrated at the right is a Rexair with the reservoir cut away to show the water which traps and holds dust so that it cannot escape. You feel better and work better when the air you breathe is clean, fresh, and wholesome.

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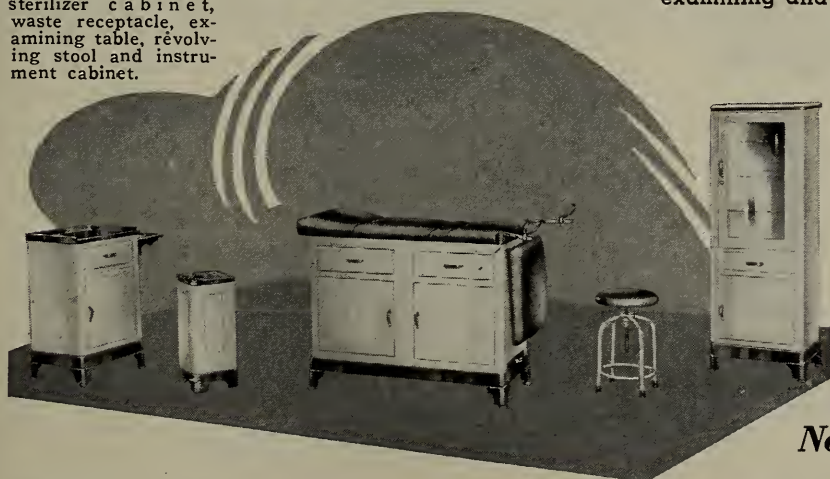
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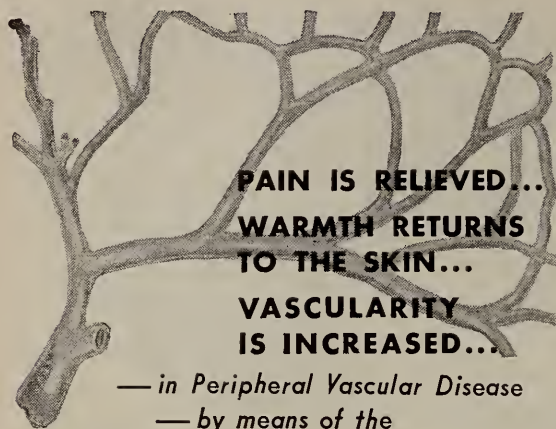
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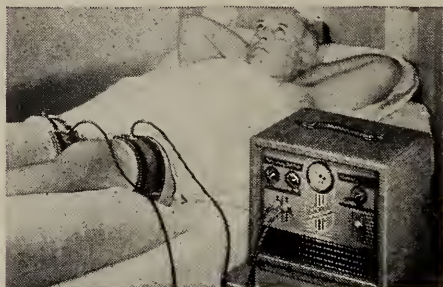




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**THE G. A. INGRAM COMPANY**

4444 Woodward Avenue, Detroit 1, Michigan

## WHAT THEY THOUGHT OF THE 1949 MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

(Continued from Page 552)

*Helen B. Taussig, M.D., Baltimore* (Guest Essayist on Heart and Rheumatic Fever Day): "Just a line to thank you for all your kindness to me while in Detroit. Also will you please see that all the members of the Michigan Postgraduate Clinical Institute to whom I am indebted for the fruit in my room and the flowers are duly and properly thanked. Fruit in my room was a consideration I've never had before and it was extremely welcome and refreshing. Flowers always pep a woman up and give her grace. Thank you very much for that kind attention and your very gracious presentations."

\* \* \*

*George M. Wheatley, M.D., New York* (Guest Essayist): "May I say that Dr. John Murphy was a wonderful host and made every minute of my stay most comfortable—I wish I could have stayed longer. There was a beautiful bowl of fruit in my room too for which you people were responsible. Many many thanks for everything."

\* \* \*

*Crawford Rose, M.D., Aurora, Ontario*: "We attended the first Michigan Postgraduate Clinical Institute two years ago because we felt that the program was the most intensive and instructive presented anywhere on the continent. We have gone again to both the second and third because we are sure of it. Each year I have returned refreshed and inspired, and the effect on my practice has been amazing. My wife and I make it our five day winter holiday, and each year as the time comes we invariably say, 'We wouldn't miss it for anything.'"

"Special congratulations on Ladies Night, and the fine entertaining floor show. Thanks again for inviting us in 1950."

\* \* \*

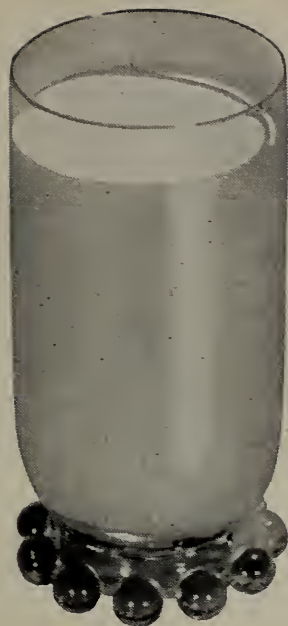
*R. S. Sykes, D.D.S., Muir, Michigan* (sponsor of the Sykes Lecture): "I am very thankful to you for your invitation to attend the recent Michigan Postgraduate Clinical Institute in Detroit. I am more thankful that you are procuring the men that you are to present such an extremely important lecture as to diagnosis and differentiation in the field which I sponsor."

\* \* \*

*W. A. McKibbin, M.D., Wingham, Ontario*: "I enjoyed the Michigan Postgraduate Clinical Institute very very much and plan on making it an annual event. I like especially the limited time taken by each speaker. The coverage was excellent; being a general practitioner in a small Ontario town, it was right down my alley. I would like to make reservations for the Michigan Postgraduate Clinical Institute of 1950."

\* \* \*

*S. Hardit Campbell, M.D., Windsor*: "I enjoyed your recent Michigan Postgraduate Clinical Institute program very much and thought the papers were up to the usual high standard. I always enjoy the hospitality shown by the 'Home Doctors' of Michigan and their hand shake makes me feel particularly welcome."



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## In Memoriam

PHILIP RAY APPEL, M.D., of Detroit was born December 21, 1910, and was graduated from the Wayne University College of Medicine in 1934. Dr. Appel was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association. He died on February 8, 1949, in Detroit, Michigan, at the age of thirty-eight years.

\* \* \*

RUSSELL GEORGE BRANDO, M.D., of Detroit was born June 14, 1899, in Detroit, Michigan, and was graduated from the Wayne University College of Medicine in 1927. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, and the American Medical Association. Doctor Brando died on January 3, 1949, in Detroit, Michigan, at the age of fifty years.

\* \* \*

HAMPTON PHARR CUSHMAN, M.D., of Detroit, was born in Milton, Louisiana, in 1894, and was graduated from Vanderbilt University School of Medicine, Nashville, Tennessee, in 1915. He served as a Captain in World War I, had been resident surgeon at Harper Hospital, since 1916, a Fellow of the American College of Surgeons and the Michigan Society of Obstetricians and Gynecologists. Doctor Cushman died February 13, 1949, in Detroit, at the age of fifty-four years.

\* \* \*

ELDRED EADIE FRASER, M.D., of Detroit, Michigan, was born October 12, 1903, in Detroit, and was graduated from the Wayne University College of Medicine in 1930. He was an active member of the Wayne County Medical Society. Doctor Fraser died on February 26, 1949, in Detroit at the age of forty-six years.

\* \* \*

ARCHIBALD DUNCAN McALPINE, M.D., of Detroit was born January 24, 1882, in Glencoe, Ontario, Canada, and attended Toronto University; he was graduated from Wayne University College of Medicine in 1905. Doctor McAlpine was a founder of the American Board of Surgery and the Central Surgical Association. He was a Fellow of the American College of Surgeons, member of the Wayne County Medical Society, a member of the Detroit Academy of Medicine, the Detroit Academy of Surgery, and the Nu Sigma Nu and Alpha Omega Alpha fraternities. He had served on the staff at Harper Hospital since 1909 and was chief surgeon there from 1938 to 1945. He also served as Department Surgeon for the Detroit Police and Fire Departments for twenty-five years. Doctor McAlpine died on February 27, 1949, in Detroit at the age of sixty-seven years.

\* \* \*

KENITH SMITH MCINTYRE, M.D., of Hastings was born April 9, 1901, in Woodland, Michigan, and was graduated from the University of Michigan Medical School in 1925. He took postgraduate work in ear,

(Continued on Page 628)

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(Continued from Page 626)

nose and throat at the University of Iowa in 1926-27. He served as President of the Barry County Medical Society in 1933 and as Secretary from 1930 through 1932. He served three terms as county coroner, and was a Commander in the U. S. Navy during World War II. He had been ill since his return from service in 1947 and died on February 20, 1949, in Hastings at the age of forty-seven years.

\* \* \*

OSCAR NAGEL, M.D., of Detroit was born February 26, 1900, in Austria and was graduated from the University of Michigan Medical School in 1932. He served as a Captain in the U. S. Army during World War II, was a member of the Wayne County Medical Society, the Michigan State Medical Society, and the American Medical Association. Doctor Nagel died August 22, 1948, in Detroit, at the age of forty-eight years.

\* \* \*

ROSCOE FRANKLIN SNYDER, SR., M.D., of Kalamazoo was born October 17, 1874, in Haldane, Illinois, and was graduated from the College of Medicine of Loyola University, Chicago, in 1901. Doctor Snyder resided in Kalamazoo for thirty-five years, was a Life member of the Kalamazoo Academy of Medicine and of the Michigan State Medical Society. He died on February 2, 1949, in Kalamazoo at the age of seventy-four years.

\* \* \*

ADOLPH EMIL VOEGELIN, M.D., of Detroit was born March 27, 1894, in Philadelphia, Pennsylvania, and was graduated from the Medico Chirurgical College of Philadelphia in 1916. He was an active and interested member of the Wayne County Medical Society, and of Phi Rho Sigma fraternity. Doctor Voegelin was fleet surgeon of the Detroit Yacht Club. He died on February 22, 1949, in Detroit, Michigan, at the age of fifty-five years.

The most important early sign of testicular neoplasm is painless enlargement of the testis.

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Cancer is prone to occur in an undescended testis, the earliest sign of which may be a tumor in the inguinal region.

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## NEWS MEDICAL

*Mirable dictu*—this happened under voluntary health measures: Deaths under one year in Michigan for 1946 and 1947 were 4,552 and 5,080, giving rates for the same years of 32.7 and 31.5.

\* \* \*

*State of the Nation's Health.*—In a recent report to the House Appropriations Committee in Washington, Surgeon General Scheele reported that the death rate from all causes in 1948 was the lowest ever recorded in the history of this country: 9.9 per 1,000 population as compared with 10.1 in 1947. The major savings responsible for this encouraging report were new lows in maternal and infant mortality, and in mortality from such diseases as tuberculosis, pneumonia, influenza, the intestinal diseases, and many other infectious diseases. In 1915, we lost 100 in every thousand babies before they were a year old. In 1948, 32 per 1,000 born were lost.

\* \* \*

*The Cook County Graduate School of Medicine* of Chicago has arranged two courses that will be of special interest to some of the members of the Michigan State Medical Society. A two weeks' Intensive Personal Course in the "Diagnosis and Treatment of Congenital Malformations of the Heart" will be offered by Benjamin M. Gasul, M.D., starting Monday, June 13. A two weeks' Intensive Personal Course in "Cerebral Palsy" will be offered by M. A. Perlstein, M.D., starting Monday, August 1. These physicians are members of the Attending Staff of the Cook County Hospital.

\* \* \*

*Charles E. Black, M.D.*, Lansing, Michigan, is the author of an article, "Influence of Local Acidification of Tissue Bordering Cancerous Growths with Special Reference to the Eosinophil, the Paneth Cell, and the Acidophilic Plasma Cell" in the *Archives of Pathology* for August, 1948.

\* \* \*

*The Sign Magazine*, Union City, New Jersey, a national Catholic magazine published by the Passionist Fathers, states "Nine times mayor of his city and the Michigan State Medical Society's choice as 'Number One Family Doctor' for 1948, Dr. Thomas E. DeGurse of Marine City, Michigan, is featured as one of the two Catholic People of the Month in the March issue." Dr. DeGurse is lauded as "a model Catholic who has followed in the footsteps of the Divine Physician." He has said, "I took an oath to relieve suffering humanity. Never in my life have I refused help to anybody, even when I had to walk miles over ice to reach them."

\* \* \*

*The Board of Examiners* of the American College of Chest Physicians announces that the next oral and written examinations for Fellowship will be held in Atlantic

### MSMS Annual Session

September 21-22-23, 1949

Pantlind Hotel—Civic Auditorium  
Grand Rapids

Be there!

City, June 2, 1949. Candidates for Fellowship in the College, who would like to take the examinations, should contact the Executive Secretary, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

\* \* \*

*The Fifteenth Annual Meeting* of the American College of Chest Physicians will be held at the Ambassador Hotel, Atlantic City, June 2-5, 1949. An interesting scientific program has been arranged for this meeting, and speakers from several other countries are scheduled to appear.

\* \* \*

*Our National Health—Rotten?*—The infant mortality rate in 1947 was the lowest on record, according to figures released by the National Office of Vital Statistics of the Public Health Service, Federal Security Agency. The number of deaths under one year recorded in the United States during 1947 was 119,173, or 8,110 more than the number (111,063) reported in 1946. However, this increase reflects the tremendous increase in the number of births during 1947 and not a rise in infant mortality. The relative frequency of infant deaths as measured by the infant mortality rate decreased from 33.8 per 1,000 live births in 1946 to 32.2 in 1947. Provisional figures indicate a further decline in 1948 to an estimated rate of 31.8.

\* \* \*

*E. F. Dittmer, M.D.*, Detroit, Chairman of the Speakers Bureau of the Wayne County Medical Society, has made fifty-four talks since January 1 on the Michigan C.A.P. Program and on Socialized Medicine.

Is this a record?

\* \* \*

*Federal and State Narcotic Licenses.*—Be sure to renew these licenses before July 1, 1949.

\* \* \*

S.S: There are signs that some leaders of "big labor" are cooling off in support of it . . . 'tis said they believe drop in cost of living will make it tough for them to bargain for wage increases . . . so they will demand benefits in the form of pensions and welfare-medical benefits . . . if government takes over medical coverage,

(Continued on Page 632)



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Lake Michigan*

A completely equipped sanitarium for the care of  
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offering all forms of treatment, including electric shock.

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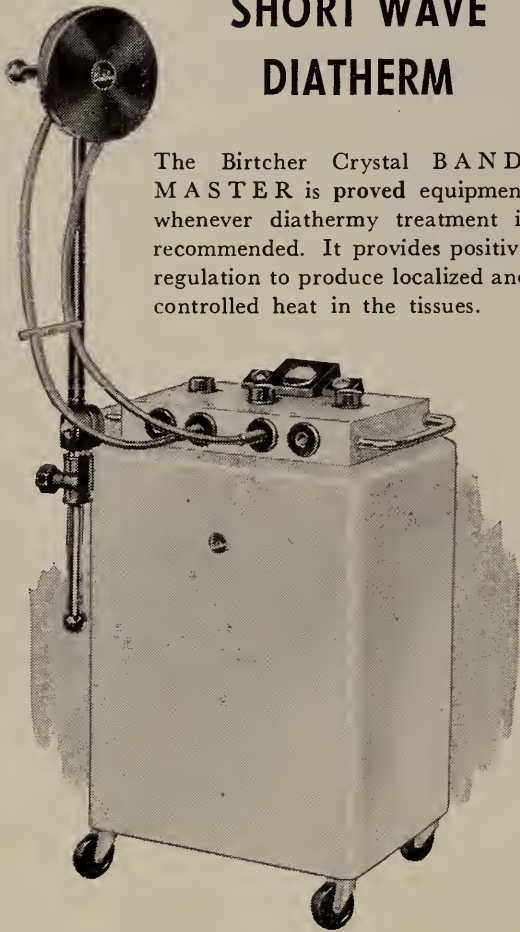


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The Birtcher Crystal BANDMASTER is proved equipment whenever diathermy treatment is recommended. It provides positive regulation to produce localized and controlled heat in the tissues.

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WRITE FOR FREE INFORMATION

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(Continued from Page 630)

they will have a weak case with employers . . . if employers will grant the medical benefits, labor will have lots to say on policy and administrative matters . . . a la John L. Lewis of United Mine Workers . . . The maneuvering will be interesting.—Ohio State Medical Association *OSMAgram*, February 1, 1949.

\* \* \*

*Ivan F. Duff, M.D., and William H. Shull, M.D., of Ann Arbor, are authors of an original article entitled "Dicumarol Poisoning" which appeared in JAMA of March 19, 1949.*

\* \* \*

"*British Taxpayer Gets Hard Labor*" is the title of an article which appeared in the newspapers of the country on April 7. It indicated that "the British taxpayer is sentenced to another twelve months of hard labor" by the 1949-50 budget "denying any substantial tax cuts and raising the basic prices of some kinds of food, including meat, cheese, and butter." The Chancellor of the Exchequer "defied the powerful trade union congress, one of the principle supports of the labor government, by declining to lower the stiff purchase taxes which range from 33⅓ per cent to 100 per cent on most things sold at retail."

The same newspapers of the nation contained an editorial comment as follows: "Many Americans on and off Capitol Hill have nursed a spoken or unspoken grievance against continuing financial support of Britain because these taxpayers' funds contribute to a system of socialization which promises security 'from the cradle to the grave.'"

\* \* \*

*British doctors vote to form "British Medical Guild" to deal with the labor government in connection with problems associated with Britain's socialized health service, according to a news story from London published in the Chicago Tribune of March 30.*

\* \* \*

*S. R. Thompson, M.D. of Luton (25 miles from London) England, Medical Director of General Motors, Limited, visited the MSMS Executive Offices on April 14 to survey the workings of a medical society organization and its public relations department.*

\* \* \*

*John L. Lewis will put up a terrific battle to get the mine operators to contribute additional money to his Miners' Welfare Fund. Reason: the Fund will go broke under its present expenditure rate approved by Lewis. —Newsweek, April 11, 1949.*

\* \* \*

*William S. Reveno, M.D., D. A. McGinty, M.D. and M. L. Wilson, M.D. were guest essayists on the program of the American Goiter Association's annual meeting in Madison, Wisconsin, May 26-28, 1949.*

\* \* \*

*The American Congress of Physical Medicine will hold its twenty-seventh scientific and clinical session September 6-10 at the Netherland Plaza Hotel, Cincinnati.*

(Continued on Page 634)

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(Continued from Page 632)

nati. For full information, write the Congress at 30 North Michigan Avenue, Chicago 2, Illinois.

\* \* \*

The American Academy of Neurology has been established "to further and encourage the practice of clinical neurology and to stimulate teaching and research in neurology and allied sciences." Those interested in active membership in the Academy are invited to write A. B. Baker, M.D., President, 19 Millard Hall, University of Minnesota, Minneapolis 14.

The first scientific meeting of the Academy will be held at French Lick Springs Hotel, Indiana, June 1, 2, and 3, 1949. Dave B. Ruskin, M.D., of Caro State Hospital, Caro, Michigan, is in charge of the scientific program.

\* \* \*

Eaton County (Michigan) Medical Society has adopted a cancer detection plan. Fifteen co-operating physicians have agreed to examine apparently well women who request appointments for special examination to rule out cancer.

This project is in co-operation with the Eaton County Farm Bureau Women, Cancer Committee, and the Eaton County Chapter of the American Cancer Society.

\* \* \*

The fifth annual Cancer Day, sponsored by the Calhoun County Medical Society and the Calhoun County Cancer Society, was held in Battle Creek on April 5. Eighty-seven doctors of medicine registered for the Cancer Day which featured a panel discussion led by Stanley T. Lowe, M.D., Battle Creek, Henry K. Ransom, M.D., Ann Arbor, and A. A. Humphrey, M.D., Battle Creek.

\* \* \*

The National Gastroenterological Association announces a course in gastrointestinal surgery at Boston City Hospital, Boston, Mass., on October 27-29, under the personal direction of Owen H. Wangenstein, M.D., Minnesota, assisted by Lord Alfred Webb-Johnson, President of the Royal College of Surgeons, London, England. For further information, write the Association at 1819 Broadway, New York 23, N. Y. (Dept. GSJ).

\* \* \*

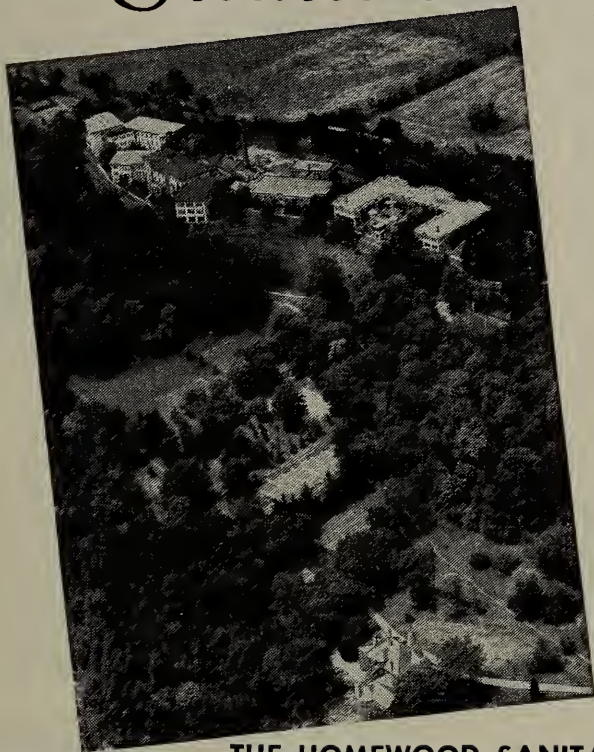
The Genesee County Medical Society's fourth annual Cancer Day of April 13 was most successful. The Cancer Day featured Arthur P. Stout, M.D., New York City, Harold W. Dargeon, M.D., New York City, Thomas E. Jones, M.D., Cleveland, Ohio, Alton Ochsner, M.D., New Orleans, and Norman F. Miller, M.D., Ann Arbor. Over 200 doctors of medicine were in attendance at the all day session.

\* \* \*

Interesting item in the Bulletin of the Genesee County Medical Society (March 22, 1949). "Public Relations Begin in the Doctor's Office. Refusal of physicians to listen to veterans' complaints and requests for hospitalization has created antagonism to the profession. If the physician will, on these questionable service-

(Continued on Page 636)

# Homewood Sanitarium



Homewood is a fully equipped 200 bed Private Sanitarium with its over 90 acres of beautiful countryside situated at Guelph, Ontario, only sixty miles from Toronto. Nervous and mild mental disorders and also a limited number of suitable cases of long standing mental illness, habit cases and cases of senility are admitted. Under the direction of a staff of Psychiatric Specialists and Physicians, all modern methods of treatment are available, including Psychotherapy, Insulin, Electroshock and Electronarcosis combined with fully up-to-date Physiotherapy, Occupational and Recreational therapy. Rates are from \$56.00 to \$75.00 per week which includes comfortable accommodation, meals, ordinary medicine and nursing care, ordinary laboratory procedures, physiotherapy, psychotherapy and occupational and recreational therapy. Write for illustrated folder.

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Medical Supt.

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(Continued from Page 634)



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PRODUCT OF MANY USES. READ LABEL  
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connected disabilities, call A. C. Blakeley, M.D., at the Veterans Administration office, 4-5605, or send the veteran to him, it will no doubt reduce these antagonistic complaints to a minimum."

\* \* \*

*Two-word description:* "General Practitioner" was the title of the *Muskegon County Medical Society Bulletin's* latest "orchids to the living" dedicated to Charles W. Beers, M.D. The subject of this month's Orchids column obtained his M.D., at the age of forty and "undauntingly took up the hardest phase of medicine: a country practice."

\* \* \*

*On the cultivation of good public relations:* That nebulous and ephemeral spirit of public relations, like the love of a good woman or an exotic flower, is a fragile quality that needs genuineness of feeling for its seed bed, and warmth of approach for its sunshine before it blooms into a budding flower of appreciation that is bestowed upon the giver in proportion as it is given. Yet, if selfishness or politics be its precursor, it will shine but briefly and be consumed by the same fire that lights it.

We must cultivate this intangible spirit of reapproachment with the public with due consideration for the public, not ourselves; the rewards will be given us in full measure. These rewards will not be measured by the length of our bank balance but by the respect and loyalty that will be tendered us.

We pause briefly to ask of ourselves, was more respect shown us when our elders had baggy breeches, saddlebags and pills, and plain common sense, or to our younger generation with ultra-scientific equipment and ultra-scientific men?

We think that somewhere betwixt and between lies a compromise that ensures good medical care and good public relations.

A psychiatrist illustrated a good example of approach. While understudying a successful exponent of psychotherapy, he was given charge of his senior's practice for a short time. Immediately the junior's attempts at psychotherapy were a frank failure. It proved to him that the physician was the psychotherapy, not the treatment. In like manner we are the public relations, not the public; and our type of approach will bring a like type of response.

We think that a thorough common sense examination and treatment, plus a warm and friendly approach to the patient, is desirable.

We think that the widow's mite should be spared, yet the affluent not charged excessively because they are affluent.

We think that the patient is a sick person as a whole, not a clinical care or a hospital registration number.

We think that gentleness and tact, and sympathy and humaneness are as essential as penicillin, serum globulin rations and choledochenterostomies.—Editorial in *Muskegon County Medical Society Bulletin*, March, 1949.

JMSMS

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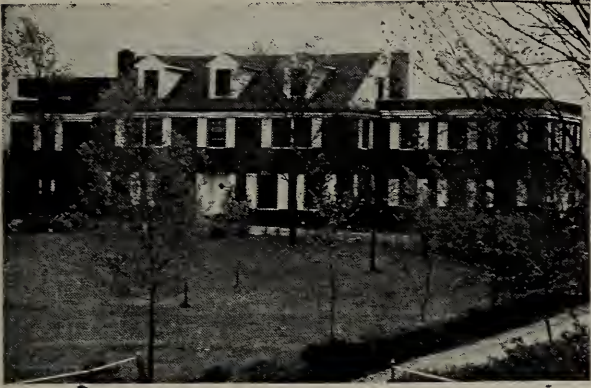
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*Camp for Diabetic Children*—Camp Ho Mita Koda is situated near Newbury, Ohio, about twenty-five miles east of Cleveland. It will operate during 1949 for two periods of one month each beginning June 26. Boys and girls between the ages of six and sixteen years are accepted. Camp activities include swimming, hiking, nature study, handicrafts, group singing and plays.

The standard fee is \$150.00 per month. There have been funds donated which can be used to help a few children whose parents cannot pay the full fee. The Camp is a non-profit organization under the direction of a Board of Trustees composed of prominent citizens of Cleveland and a director appointed by them. The Camp is staffed with a resident, licensed physician, nurses and dietitians. The medical director is E. Perry McCullagh, M.D.

All inquires should be sent to Mr. Byron Williams, Director, Camp Ho Mita Koda, R.F.D. 2, Chagrin Falls, Ohio.

\* \* \*

*The North Central Section of the American Urology Association* will hold its Annual Session at the Pantlind Hotel, Grand Rapids, October 6-7-8, 1949. This Section includes Michigan, North Dakota, South Dakota, Wisconsin, Iowa, Illinois, Indiana, Ohio, Western Ontario and Manitoba. All members of the Michigan State Medical Society are invited to attend.

\* \* \*

*The American College of Physicians* announces that a limited number of Fellowships in Medicine will be available from July 1, 1950-June 30, 1951. These Fellowships are designed to provide an opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. Assurance must be provided that the applicant will be acceptable in the laboratory or clinic of his choice and that he will be provided with the facilities necessary for the

proper pursuit of his work. The stipend will be from \$2,200 to \$3,200.

Application forms will be supplied on request to The American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa., and must be submitted in duplicate not later than October 1, 1949. Announcement of awards will be made November, 1949.

\* \* \*

*K. E. Markuson, M.D.*, Lansing, was elected President of the Michigan Association of Industrial Physicians and Surgeons and also President of the American Conference of Government Industrial Hygienists on the occasion of the Industrial Surgeons meeting in Detroit on April 7.

The Michigan Association of Industrial Physicians and Surgeons elected three other officers on April 7: President-Elect J. L. Zemens, M.D., Detroit; First Vice President O. J. Preston, M.D.; Secretary-Treasurer T. I. Boileau, M.D., Detroit.

\* \* \*

*Socialized Medicine*.—There is no major Government in the world today able to furnish the necessary doctors, nurses, hospitals, medicine and bed capacity required by its nationals under a government-subsidized medical program. Such a program destroys the confidential relationship between doctor and patient; subjects the individual case history of the patient to the local political workers on the precinct level. Once established in this country these "case cards" would be available to the Political Action Committee of the CIO, and League for Political Education of the AF of L, and other political units. Proponents of this program are promoting a "fraud" on the American people through leading millions to believe the medical service would be free.

Once this program is established you will really find out how Government red tape can destroy you. You will find just how slowly the line moves as you sit and wait, and wait, and still wait for the attention of a doctor. And the cost: With 147 million people we can calculate the cost will run all of a *billion* dollars per year. Free, did you say? Well, hardly!—FRED L. CRAWFORD, Congressman, 8th District, Michigan.



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**SURGERY**—Intensive Course in Surgical Technique, two weeks, starting June 20, July 25, August 22.  
Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting June 6, July 11, August 8.  
Surgical Anatomy and Clinical Surgery, two weeks, starting May 16, June 20, July 25.  
Surgery of Colon and Rectum, one week, starting June 13, September 12.  
Esophageal Surgery, one week, starting June 13.  
Thoracic Surgery, one week, starting June 20.  
Breast and Thyroid Surgery, one week, starting June 27.  
Fractures and Traumatic Surgery, two weeks, starting June 13, October 3.  
**GYNECOLOGY**—Intensive Course, two weeks, starting June 20, September 26.  
Vaginal Approach to Pelvic Surgery, one week, starting May 16, June 13, September 19.  
**OBSTETRICS**—Intensive Course, two weeks, starting May 16, September 12.  
**MEDICINE**—Intensive General Course, two weeks, starting June 13, October 3.  
Electrocardiography and Heart Disease, two weeks, starting July 18.  
Gastroenterology, two weeks, starting June 27.  
Personal Course in Gastroscopy, two weeks, starting May 16, June 13.  
**PEDIATRICS**—Diagnosis and Treatment of Congenital Malformations of Heart, two weeks, starting June 13.  
Personal Course in Cerebral Palsy, two weeks starting August 1.  
**DERMATOLOGY**—Formal Course, two weeks, starting June 13.  
Informal Clinical Course every two weeks.  
**CYSTOSCOPY**—Ten-Day Practical Course every two weeks.  
**UROLOGY**—Intensive Course, two weeks, starting September 26.  
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*The Discussion Conference of the Section on Nervous and Mental Diseases*, to be held on Friday, September 23, 1949, in connection with the MSMS Annual Session, will be an unusually interesting hour. It will consist of a panel discussion on "Industrial Psychiatry," based on the paper to be given by Leonard E. Himler, M.D., Ann Arbor, at the Section meeting that noon. On the panel will be Harry M. Taliaferro, President and General Manager of the American Seating Company, Grand Rapids, on "Management in Industry." Second on the panel will be Mr. Orlo L. Crissey, Associate in the Personnel Development Research of General Motors Institute, Flint, Michigan. Third will be Raymond Hussey, M.D., Dean, School of Occupational Health, Medical Science Center of Wayne University. Fourth, Mr. Harry Becker, Director of the UAW-CIO Social Security Department.

Each speaker will be allotted fifteen minutes.

The Michigan Neuropsychiatric Association is planning on having its September meeting coincident with the MSMS Annual Session in Grand Rapids.

\* \* \*

President E. F. Sladek, M.D., Traverse City, and Secretary L. Fernald Foster, M.D., Bay City, toured the Upper Peninsula of Michigan, April 20-23 to explain the MSMS CAP Program to the Menominee (A public meeting), Dickinson-Iron, Gogebic, Houghton-Keweenaw-Baraga, Marquette, and Delta-Schoolcraft County Medical Societies. They utilized every noon and evening for talks to the various groups during the four-day period.

\* \* \*

*Medical and Hospital Coverage*.—A survey of various forms of accident and health protection in the United States showed that on December 31, 1947, 52.6 million persons had some type of hospital insurance; 26.3 million were insured against the costs of surgical expense; and nearly nine million were insured against the costs of medical expense. Out of a total of 87,729,000 persons insured for hospital, surgical, or medical expense, 38,051,000 were enrolled in Blue Cross plans or in plans sponsored by medical societies. Nearly 50 million persons, however, sought other forms of protection through commercial insurance companies, hospital insurance companies, fraternal societies, welfare funds, et cetera.

\* \* \*

"Keep politics out of this picture" is the caption under a poster of Sir Luke Fildes' famous painting "The Doctor." The poster is being distributed to all the 169,000 doctors of medicine in the United States by the AMA. If any Michigan doctor did not receive an order card for the Fildes' poster, he may procure same by writing the Special Committee on Education, Michigan State Medical Society, 2020 Olds Tower, Lansing 8.

\* \* \*

*The Michigan Congressional Dinner* in Washington on May 2, was attended by four official representatives of the Michigan State Medical Society: J. S. DeTar, M.D., Milan; L. Fernald Foster, M.D., Bay City; R. J. Hubbell, M.D., Kalamazoo; and C. E. Umphrey, M.D., Detroit.



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Source.—Draft report on the medical professions in twenty-three countries, New York, World Medical Association, 1948, Table I. The only other current figure available is 16,939 physicians in Brazil in 1946, which has a population of about 45,000,000, giving thirty-six

Secretary L. Fernald Foster, M.D., Bay City, appeared at a public meeting in Fremont, Michigan, arranged by the Newaygo County Medical Society and the Fremont Chamber of Commerce on April 11. His subject was "Compulsory Health Insurance"; Dr. Foster also

#### DOCTORS PER POPULATION

Country	Population	Doctors	Doctors per 100,000 Population	Population per doctor
United States .....	141,228,673	197,605	140	710
Great Britain .....	48,788,000	55,771	114	870
Iceland .....	132,000	149	113	890
Denmark .....	4,044,725	4,250	105	950
Canada .....	11,489,713	11,901	104	970
New Zealand .....	1,750,000	1,800	103	970
Australia .....	7,500,000	7,137	95	1,100
Switzerland .....	4,000,000	3,806	95	1,100
Sweden .....	6,700,000	6,360	95	1,100
Spain .....	27,000,000	25,142	93	1,100
Norway .....	3,126,000	2,900	93	1,100
Netherlands .....	9,000,000	8,000	89	1,100
Luxemburg .....	281,572	234	83	1,200
Czechoslovakia .....	12,000,000	9,300	78	1,300
France .....	40,000,000	30,000	75	1,300
Eire .....	3,000,000	2,000	67	1,500
Bulgaria .....	7,022,206	4,563	65	1,500
Finland .....	3,865,000	1,737	45	2,200
Union South Africa .....	11,391,949	4,800	42	2,400
Egypt .....	17,000,000	4,000	24	4,200
Palestine (Arab) .....	1,300,000	291	22	4,500
China .....	450,000,000	20,000	4	25,000
Palestine (Jewish)* .....	625,000	2,386	382	260

\*"The high rate of 3,818 (per million) for the Jewish section of Palestine is probably attributed to special temporary circumstances."

physicians per 100,000 population. This is greatly out of line with the estimate for 1933 which placed Brazil's ratio as equal to Sweden's.—FRANK G. DICKSON, Ph.D., Director of the Bureau of Medical Economic Research, American Medical Association, in *JAMA*, January 1, 1949.

talked at a public meeting arranged by the medical society, the dental society, the bar association, and Rotary and Kiwanis, in Lapeer, Michigan, on April 12. His subject was "There's a Tax on Political Medicine."

Dr. Foster's talk before the public meeting in Jackson, Michigan, on April 28 included presentation of the



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MSMS Awards to Burton R. Laraway, Carl N. Saunders, and Mrs. Hall Blanchard.

\* \* \*

A five-room log cabin will be awarded to some lucky person at the annual Michigan Indian Pageant and Ottawa Indian Naming Ceremony on Saturday, July 23, at the Ottawa Indian Stadium, Harbor Springs, Michigan. The cedar cabin was given by Mr. Joseph A. Braun of Detroit to the Michigan Indian Foundation, Inc., which lists six Michigan Doctors of Medicine (honorary chiefs) among its officers and committee members: L. J. Gariepy, M.D., R. A. C. Wollenberg, M.D., Charles W. Husband, M.D., E. G. Martin, M.D., Hendy L. Smith, M.D., all of Detroit; and Danial R. Herkimer, M.D., of Lincoln Park, Michigan.

\* \* \*

Public health officers, to serve in a civilian capacity with the occupation forces in Japan, are needed by the Department of the Army. Salary is \$6,235.20 per annum plus 10 per cent post differential with quarters provided at no cost to the officer. Transportation to and from Japan is furnished. Dependents may join the officer in approximately six to eight months after his arrival in the command. Individuals selected must agree to remain a minimum of two years. For details, write Charles C. Furman, Chief, Recruitment Section, Overseas Affairs Branch, Civilian Personnel Division, Department of the Army, Washington 25, D. C.

\* \* \*

Bruce H. Douglas, M.D., Detroit, is the author of an original article "Private Physician and Preventive Medicine" which appeared in JAMA of April 9, 1949.

\* \* \*

At the recent American Academy of General Practice Assembly in Cincinnati, 143 doctors from Michigan were registered. Of these, 88 were members of the Wayne County Academy of General Practice.

\* \* \*

"The nationalized health plan thrust upon British physicians would fail if it weren't for American dollars." —E. C. Texter, M.D., Detroit, President American Academy of General Practice.

## SOCIALIZED MEDICINE

(Continued from Page 622)

be those with rheumatism, the next asthma, et cetera. The doctors lose their freedom to treat individuals as their best judgment and years of training tells them they should, but must conform to government rules and compensation regulations." Mrs. Leitch asked her audience to think of her as not only a doctor's wife but as a fellow taxpayer and like themselves an earnest citizen.

While every Auxiliary member cannot reach large audiences or have personal experiences of socialized medicine to relate, there is a wealth of material available from Mrs. Dixon, President, and the Michigan State Medical Society Public Relations office, which all Auxiliaries are urged to obtain and USE.

ALICE I. BRANCH, Press Chairman

## AMBULANCE IN SERVICE

An ambulance especially equipped to carry prematurely born babies in heated incubators to hospitals—first of its kind in the United States—was put into service in Detroit during April, Dr. Joseph G. Molner, deputy commissioner of the Detroit Department of Health, announced.



Premature Baby Ambulance. Easy access to the incubator compartment is gained through the rear door. Dr. J. J. Tansey and Nurse Georgia Carter, of Children's Hospital, show how the incubators can carefully be put into the ambulance.

It will be used to remove premature babies from a home or from a hospital that is not equipped to give them the specialized care they require, to a hospital that has facilities for their special care. The ambulance will be available to all Detroit hospitals and physicians.

The ambulance is a Chevrolet Carryall Suburban with an all-metal body on a light-truck chassis. Special equipment was installed by the Mack-Gratiot Co., a Detroit Chevrolet dealership, before the vehicle was sold to the state of Michigan. The state, in turn, is loaning the vehicle to the city of Detroit. It will be operated by the City of Detroit Ambulance Service at Receiving Hospital.

The Detroit Department of Health is co-operating in this venture with Receiving Hospital, Children's Hospital of Michigan, and other hospitals in an attempt to save a greater number of lives of premature babies.

"There is a much greater risk of illness and death to babies born prematurely than to other infants," said Dr. Molner. "In Detroit so far this year, 383 babies have died, and 163 of these deaths were from causes related to prematurity.

"Every premature baby needs to be kept in an environment where the temperature is high and constant. He needs to be provided with adequate and suitable food and he may need oxygen. He must be protected against exposure to infection. These advantages can only be provided in hospitals which have special equipment and trained personnel. By removing premature babies to

MAY, 1949

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such hospitals in this special ambulance, we believe that the death rate will greatly be reduced."

The ambulance has a front seat for a driver and doctor, and a collapsible seat in the rear for a nurse. Fitted in the rear compartment are two cored latex supports for incubators, and special equipment to convert the car's regular electric current to two 110-volt alternating current circuits, and provision for two regular wall outlets. This arrangement is necessary so that the incubator's heating unit may be plugged in first at a home, then in the ambulance and again at the hospital immediately upon arrival.

Other special equipment includes racks for oxygen tanks, a roof ventilator and a special blower system to carry oxygen and air out of the passenger compartment. The ambulance also is equipped with a siren and red flasher light, a fresh-air heater and defroster, special shock absorbers on front and rear wheels and low-pressure tires which make riding qualities easier.

Purchase of the vehicle was arranged by L. A. Potter, chief inspector, Michigan Department of Health, with W. J. Martin, truck manager, Mack-Gratiot Chevrolet Co. Representing the Detroit Board of Health in the transaction were Dr. Bruce H. Douglas, health commissioner, and Dr. Molner. Miss Mildred Riese, administrator of the Children's Hospital of Michigan, is in charge of arrangements at that hospital.

## JOHN SHERROD DeTAR, M.D.

(Continued from Page 615)

### *No More Drownings Because of One Doctor's Work and Foresight*

A boy was drowned in Torch Lake for lack of life-saving equipment.

Six hours later, Doctor DeTar arrived at the Lake for a much needed weekend rest. Hearing of the accident and the tragic lack of life-saving aids, Doctor DeTar raised funds for the establishment of twenty life-saving stations set up in a strategic pattern around the lake. He accomplished this task, he set up the plan with necessary explanatory posters, and had the equipment on the way to the lake—all within the space of twenty-four hours. There hasn't been a drowning at Torch Lake since that time.

\* \* \*

### *A Doctor Strengthens Family Ties At 5:30 A.M.*

"Doctor, I have locked my husband in his room. We just had a terrible argument and we want you to come right over and settle it."

The time was 5:00 a.m. on Sunday!

The message, a phone call to Doctor DeTar, came from one of his patients, a young married woman, mother of two children.

The doctor's questions elicited the fact that a night long argument between this woman and her husband had culminated in a violent disagreement. Yet, both husband and wife requested Doctor DeTar, their family physician, to tell them what to do.

The doctor was in their home at 5:30 a.m., he visited with them, talked to each of them separately, and with sound and sympathetic advice settled the point at issue. He charged for a house call, returned home and climbed wearily back into bed.

The couple has continued to live happily together, and the children are enjoying a normal family environment.

"Nothing unusual—except the early Sunday morning hours," says Doctor DeTar, "Just another service that all general practitioners are called upon to render."



## HOW TO APPLY A BETTER SCALP PATCH

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## THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

**THE BUSINESS SIDE OF MEDICAL PRACTICE.** By Theodore Wiprud, Executive Director and Secretary of the Medical Society of The District of Columbia and Managing Editor of the Medical Annals of the District of Columbia. Second Edition. 232 pages with 22 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$3.50.

Dr. Wiprud has partly rewritten part of his book and has added several new chapters. He discusses the personality of the successful doctor, where and how to enter practice, building of a practice and the things a young doctor can do to attract patients—interest in his community, manifest ability, willingness to work and genuine interest in his profession.

Doctors are urged to become articulate so as to express their ideas. They are urged to become active in medical affairs and organization, financial matters, how to keep records and books, how to make more than just a living. The doctor must force himself to understanding the business and financial part of his profession if he is to be a success. The law, court procedure and the charity patient get adequate and understanding attention.

The new material in the book consists of three chapters: Opportunities for Medical Leadership, Group Practice, and the Doctor Looks to the Future. The author is well versed in these matters himself, and gives the reader worthwhile information. This book is a "must" for a young man just starting practice, or still trying to decide where and how to get started. Also, the oldster can gain much of value and satisfaction.

\* \* \*

**ATLAS OF PERIPHERAL NERVE INJURIES.** By William R. Lyons, Ph.D., Associate Professor of Anatomy, University of California Medical School; and Barnes Woodhall, M.D., Professor of Neurosurgery, Duke Medical School, Durham, N. C. 339 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$16.00.

To the general medical man, the title of "Atlas of Peripheral Nerve Injuries" would be somewhat misleading, should he expect to find a clinical presentation of nerve injuries. The material for the book was obtained at the Walter Reed and Halloran General Hospitals, where during World War II approximately 1,000 nerve wounds were treated.

Except for a small amount of text describing staining techniques, histological studies of normal nerve structures, a few plates showing contractures and deformities as the result of trauma and a few plates demonstrating surgical exposure, the subject matter almost totally consists of photographs, some in colors, of histological changes following completely severed nerves, traumatic nerve lesions in continuity, nerve sutures and nerve grafts. The photographs depict sections of nerve material at different time intervals to show the progressive degenerative and fibrotic processes. The book is of atlas size so that the photographs are sufficiently large to be quite clear.

The collection and documentation warrants the high-



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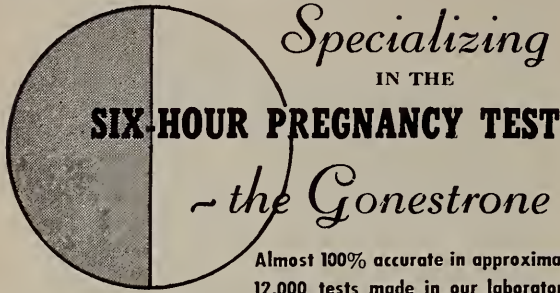
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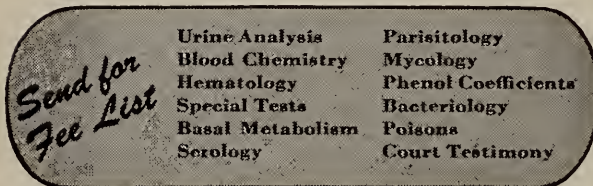
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est praise to those responsible for the recording of this collection. The information that this book contains should be of special interest to the neurologists, neurosurgeons and teachers in those fields. It would appear to be a valuable addition to medical libraries where it would be used as a reference work. The high cost and relatively small utility for the general practitioner would hardly warrant his purchase of it.—G.K.S.

\* \* \*

**OBSTETRIC ANALGESIA AND ANESTHESIA.** Their Effects Upon Labor and the Child. By Franklin F. Snyder, M.D., Associate Professor of Obstetrics and Associate Professor of Anatomy, Harvard Medical School. 401 pages with 114 figures and 18 tables. Philadelphia & London: W. B. Saunders Company, 1949. Price \$6.50.

The relief of pain during and after labor has been one of the most important studies of the medical profession. The hazards of delivery have to be considered from the standpoint of the mother, but there are also hazards of the baby that may be involved, and must be considered. This book presents all the most accepted and used methods to allay the pains, and also to ensure the safety of the baby.

Much research has attempted to replace the use of chloroform and ether, which have held sway for a century. Drugs have been proposed, and are discussed at length, occupying two-thirds of the book. The other third considers the respiratory injuries of the child. There is no discussion of the newest painless labor through establishing a mental condition of the mother to consider the operation a natural and therefore a pleasurable experience, rather than a painful procedure. Every other commonly practiced medication is given full consideration.

This is a worthwhile book of vast information.

\* \* \*

**MEDICAL WRITING.** Some Notes on its Technic. James H. Dempster, M.A., M.D., Editor, Journal of the Michigan State Medical Society, and Lecturer on Medical Writing, College of Medicine, Wayne University. With 11 illustrations. Saint Paul: Bruce Publishing Company, 1937. Price \$2.50.

This little book is twelve years old, but in its teachings on medical writing, it is just as new as though written this year. We have been using it as a guide for many years and find it very useful. Any doctor wishing help or guidance in the preparation of medical papers, would do well to purchase this little book. He would be well repaid. There is an interesting chapter on "Greek Derivatives" and a worthwhile chapter on "Bibliography" which is a great help.

\* \* \*

**MEDICOLEGAL PROBLEMS.** A Symposium Under the co-sponsorship of the Institute of Medicine of Chicago, the Chicago Bar Association and the Chicago Medical Society. Edited by Samuel A. Levison, M.D., Ph.D., University of Illinois College of Medicine. Series Two. Philadelphia: J. B. Lippincott Company, 1949. Price \$5.00.

Each subject considered in the symposium is presented from the medical standpoint, the legal presentation, and questions for discussion. Sometimes there are also comments. The general topics for discussion are "The Human Skeleton in Legal Medicine," "Psychiatry and the Civil Law," "Psychiatry and the Criminal Law," "Federal Control of Drugs and Cosmetics," and "Radiation Hazards and Health Protection in Radioactive Research." The components of the symposium are nationally known members of the bar, judges, professors of crim-



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inal law, leading doctors—Lull, Fishbein, Paul Schroeder. This is a very worthwhile volume and gives a ready response to many vexing questions.

\* \* \*

**MAYO CLINIC DIET MANUAL.** By the Committee on Dietetics of the Mayo Clinic. 329 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$4.00.

This is a paper covered book, having single pages with perforations and wire retainers. All pages are printed on one side only except the last thirty or so, making it easy to disassemble the book for ready reference or posting. All the hundreds of special diets are tabulated and published in an available form. Not only are the diets given, but the preparation of formulas and their modification are discussed. This book is the work of a committee, so is not just the ideas of a single individual, but the combined and considered results of study and experience. A most handy book.

\* \* \*

**CURRENT THERAPY, 1949.** Latest Approved Methods of Treatment for the Practicing Physician. By Howard F. Conn., M.D., Editor. Consulting Editors: M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, William J. Kerr, Perrin H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobart A. Reimann, Cyrus C. Sturgis, Robert H. Williams. 672 pages. Philadelphia & London: W. B. Saunders Company, 1949. Price \$10.00.

The field of therapy is the most important part of the physician's work, for the benefit of his patients and for ultimate results. This field has been thoroughly neglected. Diagnosis has been covered, but the most authoritative method of treatment is still not easily found. This editor has attacked his problem in a thoroughly original manner. He has assembled a corps of twelve advisors, and 243 contributors. These men do not write out a line of treatment, or summarize the literature; they give their own standard and most modern treatment or procedure.

This book takes no notice of diagnosis. It gives the latest known and accepted procedures for certain specified conditions, and in great detail where it is necessary. Allergies, infections, metabolic and digestive diseases, diseases of special fields—respiratory, endocrine, skin—all are considered. This book makes a wonderful review in therapy for the physician recently in military service, and rusty in the general field, or for one who just wants to know what the best authorities are doing in his field. It is all here.

\* \* \*

**ORAL ANATOMY.** By Harry Sicher, M.D., Professor of Anatomy and Histology, Loyola University School of Dentistry, Chicago College of Dental Surgery. With 310 text illustrations; 24 in color. St. Louis: C. V. Mosby Co., 1949. Price \$15.00.

This book was designed for instruction in dentistry, and is most complete in its field. The bones making up the skull are carefully illustrated in various aspects, com-

pletely described, and every attachment, facet, or point given prominence. The muscles, blood supply and nerves to the oral region are carefully illustrated, some in colors, and very great detail. The teeth are minutely described and illustrated. A chapter is devoted to the temporomandibular articulation; another to the viscera of the head and neck. The arteries and nerves of that region are described and illustrated in color. Much space is devoted to the dental structures and pathology, also to infections, and a chapter to ligations, with color illustrations. This book is a most valuable one, giving more valuable detail to much of the topic material than we find in the average medical text on regional anatomy. It is especially valuable to the ear, nose and throat surgeon.

\* \* \*

**CLINICAL ASPECTS AND TREATMENT OF SURGICAL INFECTIONS.** By Frank Lamont Meleny, M.S., F.A.C.S., Associate Professor of Clinical Surgery, College of Physicians and Surgeons, Columbia University; Associate Visiting Surgeon, Presbyterian Hospital, New York City. With a foreword by Allen O. Whipple, M.D. 840 pages with 287 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$12.00.

This excellent volume gives the physician and surgeon the unusual opportunity of reaping the benefit of Doctor Meleny's long and careful laboratory and clinical research on surgical infections. This book is a classic and should remain so for years to come.

After a short chapter on physiological considerations in surgical infections, the infections of each region of the body are taken up in detail. In this manner are discussed infections of the skin and subcutaneous tissues; head and neck; heart, pericardium and mediastinum, lungs and pleura; peritoneum, liver, pancreas, and spleen; gall bladder and bile passages; stomach and small intestines; appendix; colon; genital and urinary tracts; bones and joints. Surgical infections of the hand, lower extremity, and central nervous system are dealt with and there are separate chapters on surgical septicemia and surgical infections in war wounds.

The different sections are well illustrated with clinical cases and case records, and most of the sulfonamides are discussed and compared with penicillin, streptomycin and bacitracin.—S.R.W.

A uterine tumor that increases in size after the menopause is not a simple fibroid. Malignancy must be suspected.

Malignancy of the tube should be seriously considered in any patient with a profuse watery or blood-tinged discharge when curettage and pelvic examination have not revealed any definite disease of the vagina, cervix, or uterus.



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## NODULAR DISEASES

(Continued from Page 604)

pletely satisfy the requirements. In the differential diagnosis of these conditions, we must employ the best clinical acumen in combining the above findings with a complete and prolonged general study of the patient to arrive finally at an accurate diagnosis and so provide a satisfactory prognosis and effective treatment.

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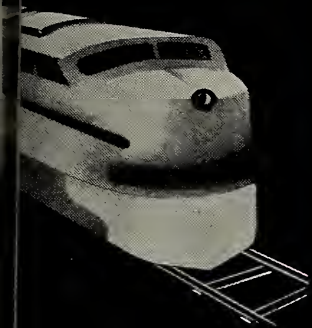
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## HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of April 13, 1949

- Monthly financial reports and bills payable were presented, studied, discussed and approved.
- The schedule of the mid-summer meeting of The Council (July 7-8-9) was approved.
- Reporting of cancer cases: The Executive Committee of The Council reiterated its approval of the Hillsdale-type plan of cancer detection, and decided that the question of reporting and the question of making the county health unit the repository of such statistical data be a matter of decision with the local county medical society.
- Larger quarters for MSMS Executive Offices: Members of the Executive Committee inspected various quarters in Lansing recommended for lease. Secretary Foster epitomized the situation as follows: "The MSMS Executive Offices need more room, and something must be done to make a decision now before the efficiency and the morale of the personnel is lessened, even though it may cost additional money; the House of Delegates has approved this necessary action which should be taken at once."
- Committee reports were accepted from the Permanent Conference Committee, the Child Welfare Committee, the Committee of Six, the Legislative Committee, the Committee on Arrangements for the 1950 Michigan Postgraduate Clinical Institute, the Committee on Geriatrics, the Rheumatic Fever Control Committee, and the Venereal Disease Control Committee.
- Immunization Month (May, 1949): Michigan's Health Commissioner, A. E. Heustis, M.D., submitted the major points on immunization and policies, to be sent to all MSMS members and to health officers of the state, as well as the immunization schedules approved jointly by the MSMS Child Welfare Committee and the State Department of Health. Dr. Heustis was thanked for this information and congratulated on effectively working out the details of Immunization Month.
- Discussion of matters that may be considered by 1949 AMA House of Delegates: (a) proposed resolution re coverage of AMA employees by other than Blue Shield; (b) proposed resolution on united support of AMA, stressing backing of MSMS; (c) Tennessee resolution re V.A. hospital service for service-connected disabilities only; (d) Missouri resolution approving AMA assessment. These matters were referred to the Executive Committee of The Council for study and for further discussion with Michigan's Delegation to the AMA House of Delegates (at May 18 Executive Committee meeting).
- Monthly reports of the President, the Secretary, and the Editor were presented.
- MSMS Scientific Exhibit in Grand Rapids, September, 1949, Annual Session, was outlined in detail, and approved.
- Nomination for Associate Fellowship in the American Medical Association for James H. Dempster, M.D., Detroit, was authorized.
- Congratulatory telegram to the Wayne County Medical Society on its Centennial of April 26, 1949, was drafted and ordered sent. E. F. Sladek, M.D., was chosen as official representative of the MSMS at the Centennial ceremonies.
- The Tri State Medical Society (Michigan, Indiana, Ohio) was invited to hold its 1950 meeting in Michigan—in Grand Rapids next April.
- W. K. Kellogg and James S. Riley, both of Battle Creek, were granted awards, to be presented by the Calhoun County Medical Society, on nomination of the MSMS Committee on Awards.
- The MSMS Mediation Committee was requested to ascertain how many counties had mediation committees, and to stimulate the formation of county mediation committees where they do not exist.
- The monthly progress report of the Public Relations Counsel was presented in detail, thoroughly discussed, and approved.

*(Continued on Page 662)*



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TRIMETON\* differs from most other antihistaminic agents in not being a derivative of ethanolamine or ethylenediamine. This difference is noteworthy and is responsible for the gratifying clinical results obtained. In one study of 227 patients with various allergic conditions<sup>1</sup>

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**BIBLIOGRAPHY:** 1. Brown, E. A.: Ann. Allergy 6:393, 1948. 2. Wittich, F. W.: Ann. Allergy 6:497, 1948.

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TRIMETON





(Continued from Page 660)

## CHARITY

The bus service was poor after two A.M. so a certain waitress in a Michigan tavern was very grateful to any late customer who would drive her home. Perhaps too grateful, for she unfortunately contracted gonorrhea. Then in five successive nights, five young men were infected. The attending physician of one boy was able to obtain the first name of the girl and the locale of employment by dint of much persuasion. He reported this to his local health department. They found and treated the girl and stopped a real epidemic.

Every source of venereal disease you can discover and report prevents *many* new cases.

## A TRUE STORY

The Committee on Venereal Disease Control of the Michigan State Medical Society presents:

The Junior College son of a Michigan physician became the unfortunate possessor of a chancre.

That fact alone does not make much of a story.

But it was disclosed that the source of the infection was the same sweet girl who had been named as the source of a similar infection in another boy about six months previously.

Yes, the attending physician in the latter case was the same physician-father!

He had not demanded treatment of this girl and had not requested contact investigation by the health authorities.

*Note!* The Michigan State Health Department reports that in 1948 only ten contact sources were reported by private physicians in 8,000 new cases of syphilis.

REPORT ALL UNTREATED CONTACTS AND SAVE A YOUTH FROM VENEREAL DISEASE. IT MIGHT BE YOUR OWN CHILD.

## CIVILIAN DOCTORS FOR PANAMA CANAL ZONE

Permanent appointments for physicians in the Civil Service now exist in the Panama Canal Medical Service according to an announcement from the Office of the Panama Canal, Washington, D. C.

Due to the high appeal of the health and living conditions in this tropical country, the number of appointments to be made is limited, and early applications are suggested, by the Panama Canal Office, from physicians who desire the opportunity for training and experience in tropical medicine under standard American living conditions.

Starting professional salaries are \$5,599 and \$6,540 a year, with free transportation to the Canal Zone provided for physicians, their families and household goods.

The Panama Canal Health Department operates several hospitals and a number of well-equipped dispensaries offering excellent professional opportunities. The Health Department also maintains constant vigilance over the health conditions of the Canal Zone and the adjacent cities of Colon and Panama City.

Living conditions there are comparable to those in a small town in the United States, except for a fully tropical climate and the fact that food, clothing, and certain other necessities are obtained through government commissaries. Prices in the commissaries, which are, in effect, department stores, are approximately the same as retail prices in the United States.

## SOCIAL SECURITY TRUST FUNDS—WHERE ARE THEY?

The government has used over \$18 billions of Social Security Trust Funds and placed IOUs for them. These IOUs can only be retired by new taxes. There is a \$7 billion deficit in OASI (Old Age and Survivors Insurance). Millions of persons now entitled to old age insurance benefits have not applied, presumably because the benefits are too small. The government has collected the tax OASI does not provide annuities at age sixty-five, but only wage-loss benefits when aged persons stop working—and then no benefits if the earnings are as much as \$14.99 in the month. The self-employed person has no business in OASI because he would have to pay his taxes all his life; but if he earned as much as fifteen dollars a month after his supposed retirement, he would not be eligible for the benefits he has paid for all his years.

## BLUE SHIELD RECOGNIZES ITS TEN MILLIONTH MEMBER

A scroll, certifying Orval George Stuhr of Daytona Beach, Florida, as the ten millionth Blue Shield member, was presented to Mr. Stuhr and his family on April 20, 1949, by L. Howard Schriver, M.D., president of the Blue Shield Commission, and Leigh Robinson, M.D., president of Blue Shield in Florida.

Mr. Stuhr is an employee of the Borden Company at Daytona Beach, and was enrolled as a member of an employee group by Florida Medical Service Corporation, the Blue Shield Plan serving the people of Florida.

Assisting Drs. Schriver and Robinson in the presentation during the Blue Cross-Blue Shield Annual Banquet, were Paul R. Hawley, M.D., chief executive officer of the Blue Cross and Blue Shield Commissions, and H. A. Schroeder, executive director of both Blue Cross and Blue Shield in Florida.

The annual banquet was the closing event of the 1949 Annual Conferences of both Blue Cross and Blue Shield Plans.

No age group is exempt, although the incidence of brain tumors is greatest in the third, fourth and fifth decades.

\* \* \*

Pain is an early symptom of all bone cancers.

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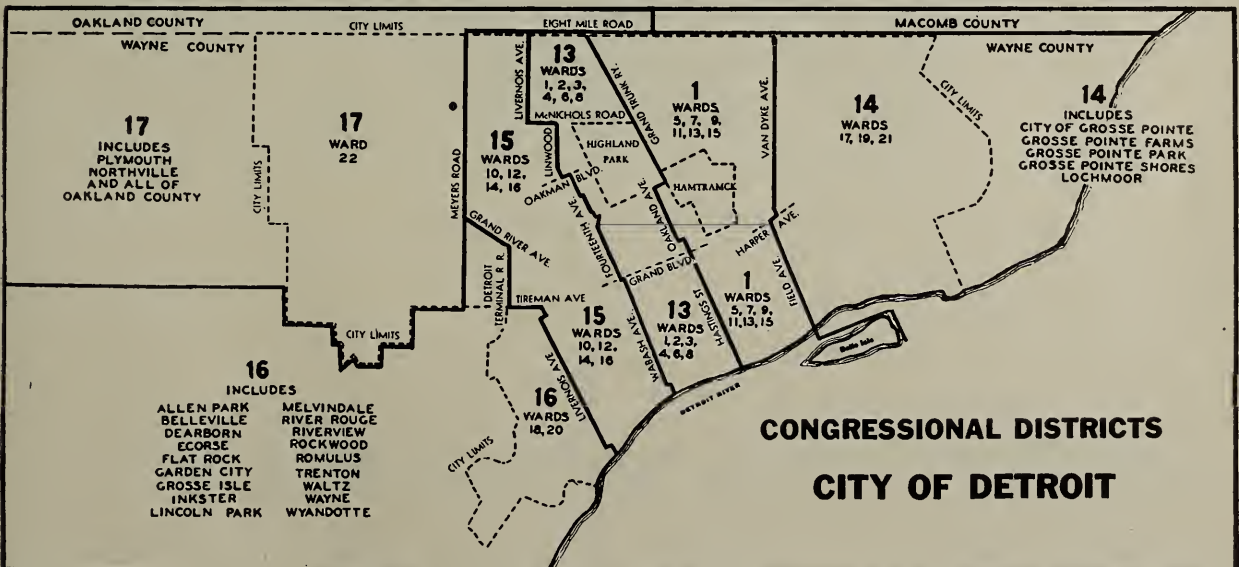
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Who shall assess the long war against  
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Or set a sum upon the gift of Life?

There is a service beyond the measure of a fee.

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This is the service...the cause...the ideal...of the American doctor.

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It is the end of pain.  
It is Hope.  
It is the lonely, unending quest for knowledge.  
It is the fight against ignorance, sloth, superstition.  
It is the dumb, unspeakable joy in the eyes of a parent.  
It is the rock of grief.  
It is cold rain and pounding storm and bone-weariness and the  
new-born babe gasping its first breath in the grey dawn.  
It is all this, and the quiet glory of the job done,  
Dedicated to service—in the name of Mercy  
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# Highlights from Under the Bushel

By L. W. Hull, M.D.

Chairman, Special Committee On Education

With the C.A.P. program running at full speed it's only "fittin' and proper" that recognition be made of those individuals who are distinguishing themselves and the medical profession in this to-the-death battle against socialized medicine . . . top honors in individual contacts go to counselor Fred H. Drummond, M.D., of Kawkawlin, Michigan, who has sent in lists containing 864 names of people who have written letters to Congress. (He also has been in continuous close contact with farm groups.) Feminine laurels belong to Mrs. F. C. Kidner of the Wayne County Woman's Auxiliary who had contacted 306 persons as of May first . . . Super-salesman of C.A.P. in Kalamazoo is Hugo A. Aach, M.D., who heads the effort in his county and district. He also combined pleasure with purpose as he took time from a Southern vacation to tell the medical societies of Louisiana and Florida about the Michigan plan . . . L. A. Pratt, M.D., is doing a whale of a job heading up the C.A.P. program in all four districts comprising Wayne County. His many committees are making their weight felt . . . Genesee County C.A.P. Chairman Henry Cook, M.D., is showing the rest of the state the "hows" of a horizontal program that is hard to beat. Dr. Cook is ably assisted by T. S. Conover, M.D., who talked to district C.A.P. meetings in Hart, Kalamazoo and Lansing, spreading the story of the Genesee plan of co-operation with organizations other than medical groups . . . C. H. White, M.D., also of Flint, has developed close co-operation with the Grange and Farm Bureau in his area, with the result that the farmers know that socialized medicine may be their unwelcome "baby" . . . Credit for the first active speakers bureau in the Auxiliary belongs to Mrs. Harry Weitz of Traverse City. Her bureau consists entirely of doctors, and she has personally canvassed *every* lay organization in the three counties around her home town, offering them speakers for their programs . . . The "12 points" of the compulsory sickness tax originated by Horace Wray Porter, M.D., and printed by the

Jackson County Medical Society are being used in many places throughout the state. Write him for a copy . . . Intensive work on the "grass roots" level is being done by D. B. Wiley, M.D., of the Oakland County Society who has been working on the national county societies "Grass Roots Conference" . . . Prominent on the speakers circuit in Wayne County is E. F. Dittmer, M.D., who has given seventy-six talks since January 1, espousing the cause of voluntary American medicine . . . Muskegon is commended for having the first and one of the most successful of the "inventory meetings." Special credit belongs to Shattuck W. Hartwell, M.D., Muskegon, for being "spark-plug" of C.A.P. activities in that area . . . Most prominent public speaker among Auxiliary members has been Mrs. W. G. Mackersie of Detroit. She has delivered more than fifty speeches to almost as many different groups. Most recently she did the groundwork for a future resolution from the National Congress of Parents and Teachers. Scene of the activity was Escanaba . . . Another worker in Detroit is Mary Margaret Fraser, M.D., who has spent much time and effort with the Federation of Women's Clubs in that city and other organizations . . . The analysis of the Ewing report by J. S. DeTar, M.D., speaker of the House of Delegates, is being requested by individuals and groups throughout the entire country. The pamphlet has been reprinted several times, with over 35,000 copies already distributed. Most recent mailing was to the 4,200 Rotary International presidents in the U. S. A. In addition to this, Dr. DeTar has been making speeches in many parts of the country and state. . . . Among effective devices being utilized by C.A.P. committees is that devised by Eugene A. Hand, M.D., of Saginaw. It consists of a glassine covered sheet which is handed to patients in waiting rooms, and contains whys and wherefores of socialized medicine and instructions on writing letters, which are usually written before the patient leaves the office . . . Another Saginaw physician with an idea is Fred J. Cady, M.D.,

(Continued on Page 668)





## The magic wall

Nowhere in the realm of biology exists so highly specialized and so biologically efficient a membrane as the mucosa of the human intestinal tract. Within this mucous membrane, about five millimeters thick, there take place the most intricate biochemical reactions designed to facilitate absorption of the products of digestion.

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*(Continued from Page 666)*

who has been successful in placing petitions in many industrial plants in that city . . . Editor William Bromme, M.D., is to be commended for his editorials and the contributions his *Detroit Medical News* is making to the cause . . . L. Fernald Foster, M.D., Secretary of the State Society, is being kept busier than the proverbial beaver with trips to every section of Michigan for major talks before large community groups. His talk invariably results in several columns of valuable newspaper comment. His recent trip with Drs. DeTar, Hubbell, Umphrey, Porter, Drummond and Mr. Wm. J. Burns to Washington found "proof of the pudding" that Michigan's C.A.P. program was making its influence felt there . . . Robert L. Novy, M.D., president of Michigan Medical Service, is responsible for a display of news articles and editorials seen in doctors' rooms of every Wayne County hospital, as well as securing the printed copies of the speech by Dr. Harris of England . . . Thanks for the "ninety-three sample letters," recently distributed, go to F. Pitkin Husted, M.D., who is heading the dynamic Bay County Medical Society committees . . . Inspired leadership for the C.A.P. program of the Woman's Auxiliary is coming from hard-driving Mrs. Robert S. Breakey of Lansing, Public Relations Chairman of the state group . . . Indicative of the activity from Auxiliary members under direction of state president Mrs. Willis L. Dixon is the number of lists being received in Lansing . . . Three Auxiliary groups have turned in 100 per cent of their lists of twenty. The honor roll has been started with the Auxiliaries from Midland, Manistee and the Houghton-Baraga-Keweenaw group . . . The Kalamazoo Academy of Medicine leads the county medical societies reporting 107 lists out of a possible 117 . . . Close liaison work with the Woman's Auxiliary has been maintained by advisor C. Allen Payne, M.D., of Grand Rapids; Dr. Payne is District C.A.P. Leader and has kept the societies of his district and the Auxiliary groups active . . . Coldwater contributes the name of H. J. Meier, M.D., for his spirited address at the Third Councilor District Inventory Meeting—His words were a constructive challenge to those present . . . P. R. Counsel Hugh W. Brenneman has been honored by being included on the annual AMA program for two, not one, speeches—one before the Grass

Roots Conference, the other the Medical Society Executives Conference . . . Mention of active Auxiliary leaders isn't complete without the name of Mrs. A. B. Aldrich of Houghton, who has personally organized the women up in "God's Country" to the point where their group was one of the first to send in all their lists of twenty . . . Another willing woman worker has been Mrs. A. F. Milford of Ypsilanti; she's organized C.A.P. committees in areas where no Auxiliary existed—a true tribute to organizational ability . . . Many many others are doing outstanding work in the C.A.P. plan, and mention will be made of their activities later. Particular appreciation should go to the councilors of the state medical society for their inspiring leadership. Without it, the program might not have prospered as it has. Last note concerns another Auxiliarite, Mrs. M. F. Bruton of Saginaw. She obtained Congressman Fred L. Crawford to speak to the Auxiliary. He re-emphasized the fact that letters should be sent to everyone, regardless of their stand on the subject.

Contributions to this column will be welcomed if mailed to the Executive Offices of the Michigan State Medical Society, 2020 Olds Tower, Lansing 8.

*Senator Allen Ellender*, Louisiana Democrat, speaking before a group of over 600 California businessmen April 29, 1949, condemned the plan as a dangerous proposal which would create a mammoth Government bureaucracy, provide inferior medical care, impose an unpredictable tax burden on the people and pave the way for the ultimate regimentation of our entire national life. "Compulsory health insurance will do violence to our way of life. It will destroy initiative, incentive, and freedom of action, the handmaidens of a system that has given us the highest standard of living and the best medical care of any nation on earth."

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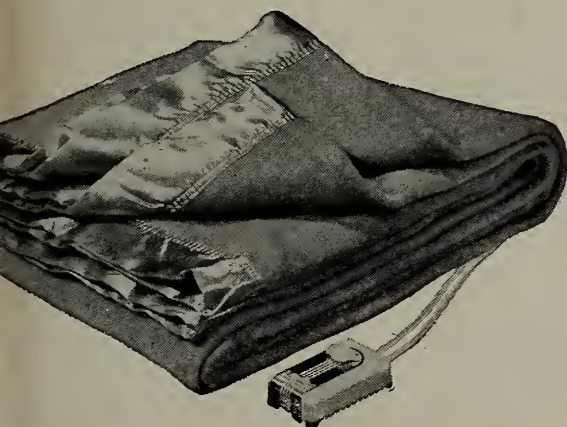
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# Cancer Comment

---

## DOCTOR, LOOK AND SEE!

In a recent examination in one of the states for license to practice medicine, one of the questions asked was, "If you found a lump in a woman's breast, what would you do?" Much to the surprise of the examiners, more than half of the replies were, "I would watch it."

After all the emphasis that has been given during recent years to the early diagnosis of cancer and especially to the necessity for removing and examining microscopically all single, painless, persistent "lumps" in the breast to determine the presence or absence of malignancy, it seems a bit odd that such a large percentage of applicants for medical license still should not appreciate the dangers of neglected breast tumors. How many of these applicants were recent graduates is not known, but presumably a considerable number was represented by this group.

Can it be that the medical schools are failing in their basic cancer teaching or, in spite of modern education, does the old fatalistic concept of waiting for a cancer to become self-diagnosed still hold sway? Whatever the cause, the above-mentioned experience would seem to indicate that medical teachers should make more impressive to their students the fundamental concepts of cancer diagnostic techniques. Neglect to do so, and neglect of the physicians to use these techniques when indicated, subjects patients to unwarranted risks and physicians to criticism.

A high percentage of breast cancers can be cured when properly treated in early stages. Cures of 75 per cent of such cancers before metastases have occurred have been reported. With an increase in the number of women seeking periodic medical examination and improvement in diagnostic methods, the number of five-year survivals of breast cancer should materially increase.

Facilities for competent tissue examinations are readily available to every Michigan physician. No patient with a suspicious lesion that can be biopsied as easily as can a breast tumor should ever be subjected to a clinical diagnosis only. Such conditions are not proper subjects for "guessing contests." As but 10 to 15 per cent of single, painless breast tumors are cancerous, it is neces-

sary that all removed tissue be microscopically examined in order to determine which is cancer. Watchful waiting will never make this decision in time to benefit the patient. Improved survival rates in breast cancer are not obtained by a watchful waiting policy.

There are just as weighty arguments for the examination of the cervix. For too long the cervix has been neglected in the general examination, although it is easily inspected and palpated. Too often, and especially during the menopausal ages, is the sign of early cancer—irregular bleeding—considered to be of insufficient importance to warrant a careful pelvic examination. In the majority of cases, the location of the suspected lesion on or near the surface makes biopsy a simple procedure.

The percentage of five-year survivals of early cervix cancer following proper treatment is even higher than that of early cancer of the breast. Together, they mean the saving of the lives of tens of thousands of women who now die annually from cancer in these two sites. Last year in Michigan the lives of 1,000 women might have been saved had their breast and cervix cancers been discovered and treated in early stages. Many of these patients sought medical care only in advanced stages of their disease. Others became advanced when the physician delayed in making the diagnosis.

Early cancer will not diagnose itself. It must be carefully searched for. Physicians must let no opportunity escape for examining all easily accessible body areas, especially the breast and cervix.

*Doctor, always look and see! Never wait and see!*

---

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673



# Your Rheumatic Fever Center

The Rheumatic Fever Control Program was set up as a public health project by the Michigan State Medical Society, and it is therefore your Rheumatic Fever Program. It is a part of the only state-wide health program in this field initiated, controlled and operated by the state medical society in any state of the Union.

Consequently every member of the Michigan State Medical Society should feel individually responsible for the success of this venture, either through active participation in the operation of the Center or through continued support in using its diagnostic and consultation services.

The Rheumatic Fever Center's primary concern is to help you arrive at a definitive diagnosis. For this purpose the Center provides the use of all diagnostic aids and evaluation of the case by a panel of competent examiners, whose collective opinion is recorded in the Center's report to you.

In addition, rheumatic fever or rheumatic heart disease frequently presents a problem in management: type of care, activity permitted, medication, dietary, et cetera. The Center's report will contain explicit recommendations in these matters.

The Rheumatic Fever Center does not treat patients; its services are consultative and diagnostic only. The patient remains your patient, and you, as the referring physician, remain in sole command and carry the responsibility of management.

## Eligibility

The question of eligibility to the diagnostic and consultation services offered by the Rheumatic Fever Center should be clearly understood by the physician and, through him, by the public. The following statements will clarify the issue.

First of all, the Rheumatic Fever Program is an M.D.'s program. Consequently only M.D.s are eligible to refer patients to the Diagnostic and Consultation Centers.

Secondly, being a doctors' program, it is founded upon the principle of the private practice of medicine and the traditional doctor-patient relationship: the referring physician receives a report of the Center's findings and recommendations, but remains in sole command and carries the responsibility of management. Its long range aim is

education, i.e., to acquaint the practitioner with the newer developments in the diagnosis and management of rheumatic fever and rheumatic heart disease. It is not limited to the direct services of the Center, but includes conferences, publications and special events (e.g., the Heart and Rheumatic Fever Day) designed to disseminate present knowledge and to stimulate general interest.

Therefore, and in consideration of the fact that the physicians who work in the Center volunteer their time and skill, it behooves the referring physician to choose his patients for referral with discretion; there should be reasonable suspicion of rheumatic fever or a problem in management for which he seeks aid. In addition, it is suggested that referrals be limited to those families upon whom comparable diagnostic studies in your colleagues' offices would inflict undue financial hardship.

## Rheumatic Fever Control Centers

The Rheumatic Fever Control Centers of the Michigan State Medical Society are located at the following convenient points throughout the state:

Harold Kessler, M.D., Chairman, *Alpena* Rheumatic Fever Control Center, Alpena General Hospital, Alpena, Michigan.

H. H. Riecker, M.D., Chairman, *Ann Arbor* Rheumatic Fever Control Center, St. Joseph Mercy Hospital, Ann Arbor, Michigan.

L. Fernald Foster, M.D., Chairman, *Bay City* Rheumatic Fever Control Center, Mercy Hospital, Bay City, Michigan.

Norman E. Clarke, M.D., Chairman, *Detroit and Wayne County* Rheumatic Fever Control Center, Wayne County Medical Society, 4421 Woodward Avenue, Detroit, Michigan.

Jerome E. Webber, M.D., Chairman, *Grand Rapids* Rheumatic Fever Control Center, 129 E. Fulton Street, Grand Rapids, Michigan.

Frank Van Schoick, M.D., Chairman, *Jackson* Rheumatic Fever Control Center, W. A. Foote Memorial Hospital, Jackson, Michigan.

H. S. Heersma, M.D., Chairman, *Kalamazoo* Rheumatic Fever Control Center, Bronson Methodist Hospital, Kalamazoo, Michigan.

Horace L. French, M.D., Chairman, *Lansing* Rheumatic Fever Control Center, 301 Seymour Avenue, Lansing, Michigan.

(Continued on Page 678)



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# PR In Practice

## MSMS Speakers Bureau

Many members of the Michigan State Medical Society are giving talks throughout the state on the subject of socialized medicine. The list which follows includes those doctors reported to MSMS recently as having made one or more speeches. This list is for the information of groups and organizations desiring outside speakers.

It would be appreciated if the name of any member of MSMS who has been speaking before lay or other groups would be sent to the MSMS office in order that it may be added to this list:

### Bay

O. J. Johnson, M.D., 207 N. Walnut, Bay City  
Fred Drummond, M.D., Kawkawlin  
L. Fernald Foster, M.D., 919 Washington Ave., Bay City  
F. P. Husted, M.D., 302 Davidson Bldg., Bay City

### Berrien

R. C. Conybeare, M.D., Fidelity Bldg., Benton Harbor  
D. W. Thorup, M.D., Fidelity Bldg., Benton Harbor

### Genesee

D. R. Brasie, M.D., 907 Citizens Bank Bldg., Flint  
E. P. Vary, M.D., 608 First National Bldg., Flint  
H. B. Elliott, M.D., 409 Dryden Bldg., Flint  
H. T. White, M.D., 504 First National Bank Bldg., Flint  
H. E. Branch, M.D., 821 Mott Foundation Bldg., Flint

### Houghton-Baraga-Keweenaw

P. J. Murphy, M.D., Calumet  
T. P. Wickliffe, M.D., 1167 Calumet Avenue, Calumet

### Ingham

L. A. Drolett, M.D., 903 Prudden Bldg., Lansing  
O. B. McGillicuddy, M.D., 1816 Olds Tower, Lansing

### Ionia-Montcalm

Robert E. Rice, M.D., Greenville

### Iron-Dickinson

E. R. Addison, M.D., Crystal Falls  
E. Theodore Palm, M.D., 412 Superior St., Crystal Falls  
W. H. Huron, M.D., 105 E. "A" St., Iron Mountain

### Kalamazoo

Donald Marshall, M.D., 1408 American National Bank Bldg., Kalamazoo  
John Littig, M.D., 1210 American National Bank Bldg., Kalamazoo  
Paul Cooper, M.D., 807 American National Bank Bldg., Kalamazoo  
Lawrence Banner, M.D., 507 S. Burdick, Kalamazoo  
S. E. Andrews, M.D., 224 E. Cedar St., Kalamazoo  
Hugo Aach, M.D., 1318 American National Bank Bldg., Kalamazoo  
Harvey Bodmer, M.D., 403 W. Kalamazoo St., Kalamazoo  
Albert Hodgman, M.D., 1029½ W. North St., Kalamazoo  
Margaret Benjamin, M.D., 709 S. Westredger, Kalamazoo  
James Malone, M.D., 420 John Street, Kalamazoo

### Mason

R. A. Ostrander, M.D., 121 Ludington Ave., Ludington  
C. A. Paukstis, M.D., 111 E. Court St., Ludington

J. C. Slaybaugh, M.D., 123 E. Ludington Ave., Ludington

H. B. Hoffman, M.D., 121 Ludington Ave., Ludington  
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Harold Gordon, M.D., Dow Chemical, Midland

### Oceana

Charles H. Flint, M.D., 315 State St., Hart  
Willis Hasty, M.D., 405 State St., Shelby

### Ontonagon

K. L. Repola, M.D., Ontonagon  
W. F. Strong, M.D., Ontonagon

### Ottawa

O. Van der Velde, M.D., 35 W. 8th St., Holland

### Van Buren

Charles Ten Houten, M.D., Paw Paw  
A. H. Steele, M.D., Paw Paw  
J. R. Ralyea, M.D., Paw Paw  
W. R. Young, M.D., Paw Paw

### Wayne

Edwin Dittmer, M.D., 14320 E. Jefferson, Detroit  
Edwin J. Neill, M.D., 8045 E. Jefferson, Detroit  
A. E. Schiller, M.D., 2008 Eaton Tower, Detroit  
Glenn Coan, M.D., 114 Maple, Wyandotte  
C. E. Umphrey, M.D., 13331 Livernois, Detroit

### Oakland

Robert Baker, M.D., 1110 Pontiac State Bank Bldg., Pontiac

Otto Beck, M.D., 308 Wabcek Bldg., Birmingham

Joseph Christie, M.D., 1201 Pontiac State Bank Bldg., Pontiac

O. R. MacKenzie, M.D., 128 Common St., Walled Lake

### St. Joseph

S. Albert Fiegel, M.D., 110 Pleasant St., Sturgis  
R. J. Fortner, M.D., 218 E. St., Three Rivers  
E. M. Gillespie, M.D., 104 W. Chicago, Sturgis  
R. A. Springer, M.D., 125 Market, Centerville

### St. Clair

Walter Boughner, M.D., Algonac  
J. L. Sanderson, M.D., 515 Pine St., Port Huron

## Materials Available from MSMS

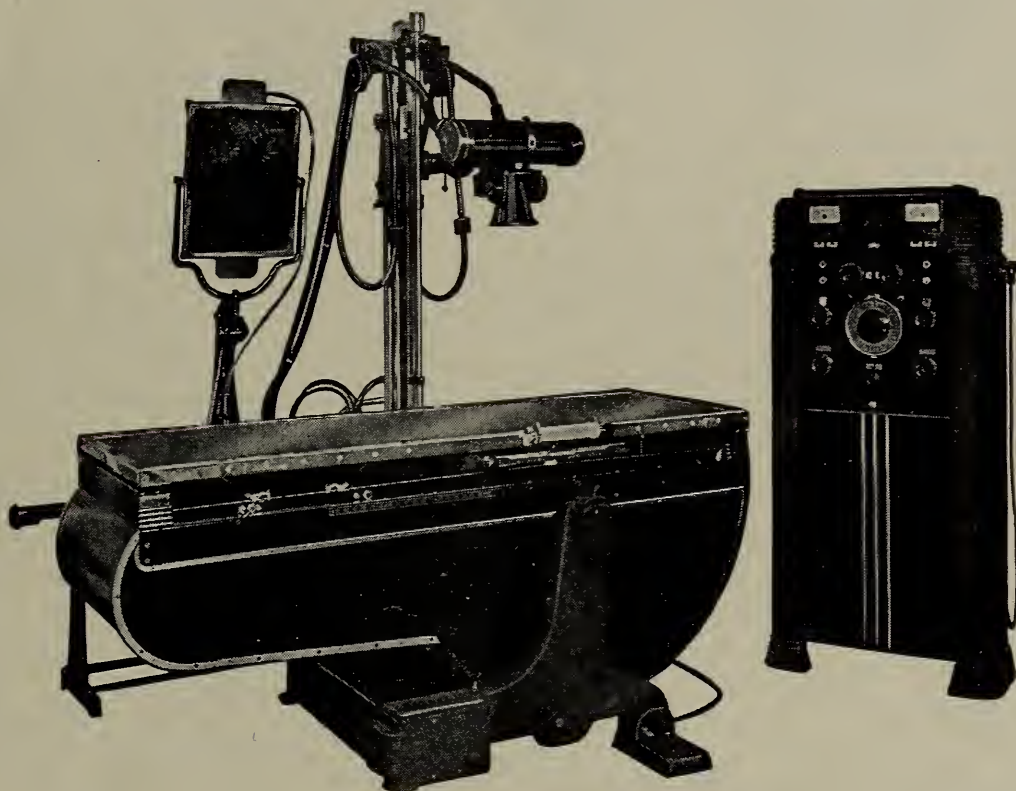
The materials listed here are available in reasonable quantities from the MSMS Public Relations Office, 2114 Olds Tower, Lansing 8, Michigan. Some of the items will be available only until present stocks are depleted while others will be reprinted.

- No. 1—Analysis of the Ewing Report—by J. S. DeTar, M.D., Milan, Michigan.
- No. 2—Uncle Sam, M.D.—published by the Michigan Public Expenditures Survey and shows Socialized Medicine as an economic threat.
- No. 4—Brookings Institute Report Conclusions—reprinted by National Physicians Committee (The conclusions of an unbiased survey).
- No. 5—Doctor, My Statistics Feel Funny—by Maurice Friedman, M.D., reprinted from the *Nation's Business* (Analysis of draft rejection figures).
- No. 6—Socialism—A Politician's Paradise—transcript of radio talk by Henry J. Taylor.
- No. 7—A Step in the Wrong Direction—by Dorothy Thompson (First-hand experiences in England).

(Continued on Page 678)



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## Materials Available from MSMS

(Continued from Page 676)

- No. 9—**American Health Planning Avoids Compulsion**—talk by C. E. Umphrey, M.D.
- No. 10—**The Issue of Compulsory Health Insurance**—talk by A. E. Schiller, M.D.
- No. 11—**Michigan's Progressive Voluntary Health Program**—talk by H. W. Brenneman.
- No. 12—**Porter on Health Insurance**—Reprint from *Cleveland Plain Dealer*. "Health Insurance is a fine thing—and will remain so until the government gets hold of it."
- No. 15—**The Dr. Harris Letter**—Dr. Harris, prominent British surgeon, writes his views on British medicine to a friend in Crawfordsville, Ind.
- No. 16—**The 12 Points of the AMA**.
- No. 17—**Government Medicine in New Zealand**—by A. Lexington Jones, D.D.S., M.S., of New Zealand (Its social, economic, and political implications).  
(This pamphlet is the only one available in unlimited quantities. It is suggested that this item be used for distribution through reception rooms, et cetera.)
- No. 18—**Compulsory Health Insurance**—This is the first of the AMA pamphlets and is on the order of "Uncle Sam, M.D."
- No. 19—**Forcing Socialized Medicine on America**—This is an address by the Honorable Forest A. Harness which tells of the use of Federal employees and Federal funds to further the cause of socialized medicine.
- No. 20—**Federal Help in Life and Death**—An intriguing reprint from *United States News* which tells you what to expect from the Social Security "cradle to the grave" plan.
- No. 21—**Pick-pocket Medicine**—A speech by John S. Bach, M.D. It is an interestingly styled talk which contains many good ideas for speeches.
- No. 22—**Warns State Medicine to Cost Billions**—A reprint from the *Chicago Daily Tribune* showing in Administration figures that the initial cost of compulsory health insurance would run \$18 billion dollars yearly.
- No. 23—**American Medicine Replies to President Truman**—By E. L. Henderson, M.D. This is a short one-page diagnosis of the President's Compulsory Health Insurance program and well worth reading.

## The Horizontal Activity

Many outstanding lay organizations throughout the State of Michigan are passing resolutions against the socialization of medicine. As the horizontal effort of the C.A.P. program progresses, many other civic groups will be acting upon and passing similar resolutions. As notice is received in the MSMS office of their action, they will be printed in JMSMS. If any members have been instrumental in securing any such action, it would be appreciated if the information could be forwarded to 2020 Olds Tower, Lansing 8, Michigan.

The action by Michigan's Legislature in memorializing the Congress of the United States against enactment of legislation relative to socializing

medicine stands out as a tribute to the work of our physicians and their friends. It is tangible evidence of the feelings of the majority of the citizens of this state.

Those organizations passing resolutions to date include the following:

Michigan Hospital Association.  
Michigan Postgraduate Clinical Institute.  
Birmingham Chamber of Commerce.  
Greater Jackson Association Board of Directors.  
Lansing Life Underwriters.  
Michigan Chiropody Association.  
Isabella-Clare Counties Automobile Dealers Association.  
Houghton Rotary Club.  
Republican State Convention.  
Kalamazoo Chamber of Commerce.  
Detroit Archdiocesan Council of Catholic Women.  
Detroit Sorosis Club.  
All County Medical Societies.  
All County Woman's Auxiliaries.  
Detroit Business Woman's Club.  
Wayne County Women's Republican Club.  
United Daughters of Confederacy.  
Metropolitan Club Auxiliary (East Detroit Chapter).  
Legislature of the State of Michigan.

## Your Rheumatic Fever Center

(Continued from Page 674)

Moses Cooperstock, M.D., Chairman, *Marquette Rheumatic Fever Control Center*, Northern Michigan Children's Clinic, Marquette, Michigan.

Devere Boyd, M.D., Chairman, *Muskegon Rheumatic Fever Control Center*, 1735 Beck Street, Muskegon, Michigan.

Donald S. Smith, M.D., Chairman, *Pontiac Rheumatic Fever Control Center*, St. Joseph Mercy Hospital, 900 Woodward, Pontiac, Michigan.

E. W. Meredith, M.D., Chairman, *Port Huron Rheumatic Fever Control Center*, 1102 Sixth Street, Port Huron, Michigan.

David Gage, M.D., Chairman, *Saginaw Rheumatic Fever Control Center*, 27 Jarvis Yawkey Court, 217 S. Jefferson, Saginaw, Michigan.

Mark Osterlin, M.D., Chairman, *Traverse City Rheumatic Fever Control Center*, Central Michigan Children's Hospital, Traverse City, Michigan.

## FROM THE P. R. MAILBAG

*Medical Society of the State of Pennsylvania*: "... like to order 500 copies of the DeTar analysis as I think it is one of the best pieces of literature produced for speakers in preparing talks on socialized medicine."

*Arkansas Public Expenditure Council*: "We have heard of your excellent campaign against compulsory health insurance. Details of your campaign would be most helpful to us."

*Rotary Club of Topeka, Kansas*: "It was a pleasure to receive a copy of 'The Country Doctor Answers the Ewing Report' with the compliments of the MSMS. We would appreciate receiving any additional materials you may have."

*John Scilleri, M.D., Paterson, N. J.*: "I am writing for information on your C.A.P. program and any ideas and suggestions you may have for starting a similar program in New Jersey."



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# Socialized Medicine

## SOCIALIZED MEDICINE IN GREAT BRITAIN\*

Your letter came this morning with the interview of Dr. Finney who seems to have sensed most of what the conditions here are today. In watching the medical system develop, I can see several things: (1) whether it does good to the people it should help, depends entirely on the individual doctor, who apparently is completely free to be a saint or a rogue as he sees fit; (2) everyone who can possibly afford it is leaving the free service to become a paying private patient again; (3) the expense for the nation is so enormous that some positive alterations will have to be made—I don't see how the British people can stand more taxation, and there are very few "rich" men left to ruin; (4) already some of the things which were allowed (maternity equipment, for example, and certain medicines) are being withdrawn from the free list; (5) none of the new building or additions to doctors' houses which were promised are yet begun, nor can they be for decades.

In a way I think some doctors like it. They no longer have to "pander" to any patient, and so feel freer; and though they in many cases have smaller incomes, they think this will be remedied. Anyway there are several neat little ways of getting extra funds. As it is a patient can be either private or one on the panel as he wishes, so I expect that the scheme is boiling down to very much the same as it was before it came into being, except that the wives and children of the less well off—their men were on the panel before but not their families—will use the service. I was talking to a woman, a farmer's wife, who has been getting state dentistry, and she says that each time she has had a tooth filled, the filling falls out within a few days and she has to have it done again. Another instance of getting more money from the government, because dentists are paid by the visit and not per capita.

I still object to the scheme for the same reasons I always have—that it is bad for the standards of doctors—so many sorts of small corruptions open to them. To make a good income, they have to take more patients than they can decently look after. All doctors are graded alike, with no incentive for the better man. The scheme was not intended as much to help the sick as to level up "privileges," which always results in bringing the level to mediocrity. The idea is Utopian—as is Communism—but since all humans are not even good men, let alone saints, its results are liable to have all the faults of the Soviet system, which I don't believe is progressive, not even in the long run. My farmer's wife says that the people now think of doctors as being their servants, and they are inclined to treat them as such, having no knowledge of the training and education it takes to make a doctor and no respect at

all for special mental capacity. In a nation whose government offers more to a bricklayer (£395-0-0) per annum than to a scientist to do special research (£360-0-0) (this is from an advertisement for the government) this is quite easily understood. I should think that this attitude would be especially abhorrent to the Americans who have such high regard for achievement, an attitude which the rank and file of the British lack entirely. They love money, but think that money making is degrading; a lot of them think that work is degrading and that a life of leisure paid for by the State is ideal.

... Just today coupons have been taken off all clothing, though these remain very high priced, not very good quality, and not plentiful. There is little change in the food condition except that there will be seven extra pounds of sugar instead of two as last year (just once during the summer for jam making). Meat especially is the greatest shortage: 1/3's worth for each person each week. These are the hardships of the individual. Farmers have extra allowances and plenty of meat as well as their own produce. Factory workers have canteens from which they get an extra good meal each day. The man who used to be poor is now better off than the man in the next better income group—his ambitions have not grown except for leisure and comfort. But such men as artists, musicians, clerks and the small professions are finding life difficult if not actually hard. Any of these would be glad of almost anything and worthy of help. I cannot think of a "group" of men, but I can think of dozens of men who look shabby and often cold as they go and come on their daily work. The chairman of the local branch of the British Legion has told me that he and his friends would at any time be most grateful for any sort of clothing I can pass on to him from my "American boxes."

Except for the completely disabled, these men like to make a donation which now I divide between their own benevolence section and one of the other charities for which I try to raise funds. There are the disabled whom the local branch helps, and occasionally I give clothing and food outright to them or their families. The average wage here is good and there is little unemployment, but almost everything is in very short supply. Going away from our immediate country district, there must be need for such organizations as the Institute for the Blind in Leicester, or St. Dunstan's in London, or the Musicians Benevolence in London, who would be most grateful for any sort of assistance. I do think it marvelously kind of you to suggest that your "Friday Club" help us out and needless to tell you I will be very glad to act as an intermediary for anything you think worth your consideration.

In passing, it may be of interest to you that during the past eighteen months, through the kindness of your daughter, Miss Troxell, and a friend in Boston

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\*From a letter to Dr. Roy McClure from an Englishman, February 19, 1949.



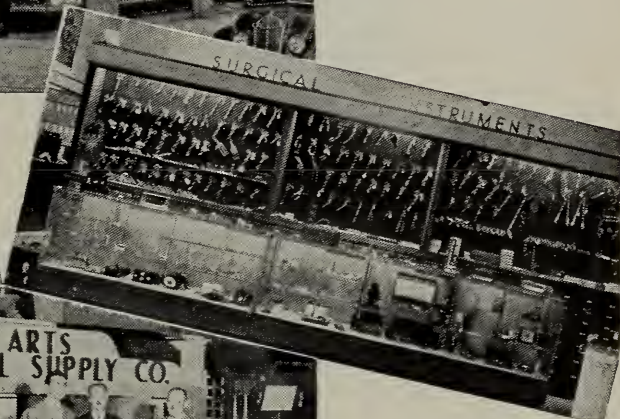
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## SOCIALIZED MEDICINE IN GREAT BRITAIN

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(though by far the greatest share has come from Baltimore) I have been able to send donations as follows: £55 to St. Dunstan's for the Blind, £32 to the Musicians Benevolence, £77 to the British Legion, and £52 for the various other smaller charities. The people who have had the clothing have been just as grateful as the organizations, which find it more and more difficult to raise money.

You know I have almost forgotten a group who are really poor, and that is the clergy. They are so always helping that one forgets to help them, but their livings never were opulent and now with all the costs soaring they are in great need. Individuals would be glad of aid or their organizations for their benevolence would be glad of any sort of donations. I do hope I am not burdening you with far too much detail, but I want you to know that anything and everything is truly and deeply appreciated and that the gifts we have been receiving have made a whole lot of us far more comfortable and happy than we otherwise could have been.

And now your other questions about which I am almost as hotly interested—the National Health Service. Miss Somerset's articles seem controlled and, as far as they go, state the truth. But I do not believe with Sir Harold Wernker that there are the same causes in the U.S.A. as here to bring about socialized medicine, nor do I think that bringing it about was very much more than political propaganda. Americans are far prouder individuals, prouder of their separate achievements; nor do they look to someone else to think for them and to care for them. I could go on and on about the British social system which has brought these drastic changes about. The American has pride in making a success; the average Englishman pride in the fruits of success, and he adores leisure. But this is getting away from the medical system.

It is here, it is probably here to stay, though in a modified version of its present line up, but that doesn't mean it is right. Though I think that medical service for the poor and needy—even the not-quite-so-needy—could and should be supplied, I think the idea of a panel for everyone is wrong, and wrong for an enforced panel for any group of people. It is all very well to say that health has improved since the introduction of the earlier panel system in England. Of course it has, as it has all over the rest of the world with the advancement of knowledge. I expect it is better in the African jungle—as it is in America—all without the blessing of the British government. But I am certain that the panel system made indifferent doctors careless and even rude, and complete nationalization will make this condition even worse. My doctor said that all the doctors did their level best not to take on people whose general health isn't first rate: "It isn't good business." He also told me of ten men in this country who each had over 6,000 patients on his list and one who had more than 8,000. I asked him if it, the whole scheme, were going to work. "Only if they pay us a whole lot

more." The older men are getting out, except those who have only private patients, and here they won't work in the hospitals. I do not want to repeat what I have already written Miss Troxell; I think I've said most of all I have thought. But except for the people who are liking to get everything possible free, there seems to be an uncomfortable feeling about it all.

I met friends on Saturday who are getting glasses and teeth—on the nation—but they spoke as though they were a bit ashamed of it. One can never get an appointment at a given time except by great courtesy of the doctor. But some doctors—other than those who are making as much hay as possible while the sun of experimentation is shining—like the freedom of feeling beholden to no one and not much to their consciences. People in general will accept the system on the grounds that it is something for nothing. But I think it is degrading to patient and doctor alike and has undercurrents of real evil far and beyond the evident danger of corruption so often associated with government-controlled businesses. It is a Utopian sounding plan, as is Communism, and cram full of the same sort of dangers when carried out by mere mortals.

Because I am so passionately against it I am going to send your clippings to my surgeon in London, whose kindness and calmness have had almost as much to do with his world-wide reputation as has his skill. I'll ask him to write to you, for he abhors it as much as I do. What he has to say will be sound and considered.

My own personal reaction is that I can't accept a £100's worth of service from a doctor who is paid £2 for it all. And I want to feel that it is his business and not his courtesy to come to me when I need him.

As to the medical policies, I am by nature and education an individualist and I believe that every man should be made to shoulder his own personal and family responsibilities. If he hands them over to the state, he is at the same time handing over his personal freedom, though for sometime he may not realize this. The tyranny of politicians with swelled heads is as bad as any other tyranny, and perhaps worse.

Medicine, with the aid of a generous public acting on Christian principles, has hitherto managed its own affairs in this country. The poorest, thanks to the voluntary hospitals and the free services of their doctors, often had more efficient medical attention than the middle classes. Our twenty-four-hour general practitioner service was unsurpassed in the world. What was needed was an extension of the panel system to cover the families of insured persons, and increased state support of the voluntary hospitals. Evolution, not revolution.

"Free" railway travel would soon produce chaos on the railways. "Free" medicine is reducing the doctors to certificate signers and prescription writers for minor ailments. They have to deal with crowds in their surgeries when they should be visiting seriously ill patients, and many of them are already suffering

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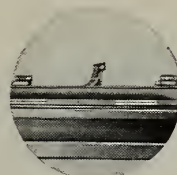
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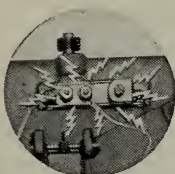
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# SOCIALIZED MEDICINE IN GREAT BRITAIN

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from overwork. The system is proving enormously expensive in spectacles, medicine, et cetera.

I think the U.S.A. would be well advised to wait and see what happens in this country before imitating our scheme.

## SENATE AND HOUSE HANDED HEALTH BILL

### Provides Medical Protection for All Covered by Social Security

(S. 1679, H.R. 4312 and 4313)

Washington—(AP)—Ten Administration Democrats introduced a bill to carry out President Truman's plan for compulsory health insurance covering at least 85,000,000 persons.

It calls for the Government to pay all medical, surgical, dental and hospital bills for persons covered by Social Security and their dependents.

The costs would be met by a new payroll tax of 1½ per cent each on covered workers and their employers, plus about \$1,500,000,000 a year in direct appropriations out of the Treasury.

REPUBLICANS and some Southern Democrats are strongly opposed to the bill, and it is given only a slim chance of passage at this session of Congress.

The American Medical Association also is fighting it. Chairman Murray (D., Mont.) said his Senate Health subcommittee will meet Wednesday to schedule hearings on the bill. He is one of the sponsors.

Other Senate sponsors are Thomas (D., Utah), Wagner (D., N. Y.), Pepper (D., Fla.), Chavez (D., N. M.), Taylor (D., Id.), McGrath (D., R. I.), and Humphrey (D., Minn.).

The bill was introduced in the House by Reps. Dingell (D., Mich.) and Biemiller (D., Wis.).

It calls for other aids to health in addition to the insurance plan.

PRESIDENT Truman called for the legislation in a 3,000-word message to Congress last week, but he left the details up to Congress.

The bill would make health-insurance coverage compulsory at the start for everyone now covered by Social Security.

If Social Security is broadened to take in the self-employed, farm workers and domestic servants, as the Administration wants, the health program eventually would reach up to 130,000,000 of the 145,000,000 people in this country.

The payroll tax would apply to the first \$4,800 of an employee's income. Thus the maximum paid by most covered employees would be \$72 a year.

\* \* \*

THE SELF-EMPLOYED, farmers and domestics, if brought under the program, might pay a higher tax because their payments would not be matched by an equal tax on employers. The exact details have not been worked out.

The actual taxes would not be imposed in the bill in-

troduced Monday, since taxes must be levied in separate bills originated by the House.

Administration officials have indicated the actual tax measure, when introduced, will provide for a starting-off levy of only ¼ of one per cent.

This would be collected for about eighteen months while plans were laid to start the program operating. Once benefits began, the tax would go up to 1½ per cent.

\* \* \*

THE GOVERNMENT'S direct contribution would be determined from year to year by appropriation bills.

The health measure authorizes appropriations of one per cent of the national payroll, about \$1,500,000,000 a year, after the program is in full operation.

The AMA, which has branded the Truman plan "socialized medicine," contends that the fund of about \$6,000,000,000 a year foreseen in the Administration bill would not be nearly enough to pay costs of the program.

It says the annual cost will run between \$10,000,000,000 and \$18,000,000,000.

\* \* \*

BESIDES THE insurance plan, the bill provides for:

1. Federal grants to states for existing schools of medicine, dentistry, nursing, public health and sanitary engineering.
2. Federal aid for expansion of such schools and construction of new ones.
3. Scholarships for students at such schools.
4. Broad authority for the United States surgeon general to carry out research in such fields as poliomyelitis, diabetes, arthritis and rheumatism, multiple sclerosis, cerebral palsy and epilepsy.
5. A big increase in Federal aid for hospital construction.
6. A program of grants and loans designed to encourage doctors, nurses, dentists and other trained personnel to practice in rural or other shortage areas, and for the construction of clinics and other facilities to such areas.
7. A five-year program of Federal aid to farmers' experimental health co-operatives.
8. An increase in grants for expansion of state and local public health services.
9. A new program of Federal grants for research projects "relating to the development of children and the community aspects of child life." The money would go to universities and other child research institutes.
10. An increase in the present grants-in-aid for material and child health and for crippled children's services.

## OPPOSE SOCIALIZED MEDICINE

Hollywood, Florida, April 28.—Delegates to the annual convention of the General Federation of Women's Clubs, which has a membership of five million in the United States, adopted unanimously today a resolution which opposed "Government control of health services" and supported "the extension and development of voluntary health insurance."

The resolution, which was introduced at the fifty-

(Continued on Page 686)



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## OPPOSE SOCIALIZED MEDICINE

(Continued from Page 684)

eighth international session, carried great import because it expressed the feelings of millions of women on the subject of sickness taxation. The General Federation is made up of 16,500 clubs with a total membership of 7,700,000. Only 2,700,000 of those members reside in foreign countries.

When the final action was taken, there were only about three dissenting votes. It appeared as though every delegate stood up to be counted when the question was asked: "All those in favor of the resolution, please stand."

The resolution, labeled "Emergency" because it was not presented at the January meeting of the Resolutions Committee, said:

"WHEREAS, needed medical and health services should be placed within the reach of every individual within the United States, and

"WHEREAS, we believe the most effective approach to the national health problem lies in the extension and development of voluntary health insurance, and

"WHEREAS, we believe the extent of Federal grants necessary to aid the various states in providing care for the medically indigent can be determined by nation-wide governmental supported surveys made by State agencies, therefore

"RESOLVED, that the General Federation of Women's Club in convention assembled April, 1949, goes on record against Government control of health services which would jeopardize free enterprise, establish heavy new tax burdens and unprecedented national deficits, and infringe upon the powers of the individual states.

"RESOLVED, that copies of this resolution be sent to the proper authorities—and the members of Congress."

Hollywood, Florida, the convention city, was overrun with representatives of the Federal Security Administration and other Government agencies, all doing their utmost to block action against the Truman-sponsored compulsory health insurance program. But when the showdown came, there were only two women in the auditorium willing to speak for the Truman program, and only three dissenting votes were cast.

## CATHOLIC AGENCIES FIGHT HEALTH MONOPOLY PLAN

Washington.—Three Catholic agencies, all concerned with Catholic health bureaus and charities, have warned against "the monopoly which would be the inevitable result of the government system" of compulsory health insurance in a bill before Congress.

The agencies made public "a voluntary approach to a national health program." The agencies include the NCWC Bureau of Health and Hospitals, the National Conference of Catholic Charities, and the Catholic Hospital Association of the United States and Canada.

A foreword to the statement was written by Bishop Karl J. Alter of Toledo, Episcopal chairman of the NCWC Bureau of Health and Hospitals, and chairman

of the administrative board of the Catholic Hospital association.

The Catholic agencies offer their proposal "as an illustration of a sound public policy to promote the health and well-being of the people of the United States."

"Health care," the statement said, "should be made available to all people not only in terms of institutional facilities and trained personnel, but also in terms of reasonable cost to the public."

Bishop Alter wrote that the controversy on the national health program "revolves in large part around the issue of an exclusive and compulsory government health system versus private and voluntary efforts supported by government assistance instead of control."

"Many competent authorities," the Bishop said, "fear that an exclusive state system under a compulsory tax will necessarily involve a loss of freedom for the voluntary health agencies and put an end to private initiative to the ultimate detriment of the health of the nation. There is no controversy or disagreement concerning the advisability or advantage of a prepayment plan to meet the cost of medical care.

"The state has a definite responsibility to help protect and promote the health of the nation, but voluntary agencies have a definite right and responsibility to exercise an important function in planning as well as executing such a program."

The three Catholic agencies state "it is not so much the principle of taxation for health protection which is opposed. Rather, it is the monopoly which would be the inevitable result under the government system, and the misnomer of calling the tax an insurance."

"We submit that a program of service by voluntary associations and private initiative backed by the government financial support is more in keeping with this sound social principle than a federal compulsory health insurance system." [NCWC Wire]

## STATUS OF NATIONAL HEALTH LEGISLATION

The Senate Committee on Labor and Public Welfare, which has jurisdiction in the Senate over health legislation, has announced its plans for public hearings on various health bills.

**Major Bills:** On May 16, the Senate Health Subcommittee under the chairmanship of Senator Murray (D., Mont.) started public hearings on major health bills. The central problem with which all of these bills is concerned is the problem of paying for health and medical services.

### Administration Bill—Socialized Medicine

*S. 1697*, introduced by Senator Thomas (D., Utah) and seven other Democratic Senators, is designed to carry out President Truman's recommendation to make all medical care facilities available to approximately 85 per cent of the population through a national system of compulsory health insurance (socialized medicine). The program would be financed by payroll deductions of 3 per cent of the first \$4,800 of a person's annual earn-

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## STATUS OF NATIONAL HEALTH LEGISLATION

(Continued from Page 686)

ings—half to be paid by the employe and half by the employer. The federal government would add up to ½ per cent of the payroll through 1954 and up to 1 per cent through 1957. This would create a special fund of approximately \$6,000,000,000 a year for the payment of medical, dental and hospital bills. *The medical profession is concertedly opposed to this bill.*

### Republican: Taft-Smith-Donnell Bill—Aid to States

S. 1581, introduced by Senator Taft (R., Ohio) and two other Republicans, is designed to assist the states to provide general health, hospital, medical, and dental services for families and individuals "unable to pay the whole cost thereof." The bill authorized a total of \$1,250,000,000 in appropriations over a period of five years for grants to the states. Each state would make a state-wide survey, on the basis of which it would then prepare a state plan setting forth a five-year program for broadening the distribution of its medical and hospital services to a point where these services are available to all families and individuals unable to pay the whole cost of such services. The medical and dental aspects of the state plan may be carried out through payments to voluntary health insurance plans. Partial charges may be collected from beneficiaries able to pay in part for the services rendered to them.

### Bi-Partisan Bill—Aid to Medically Indigent Through Blue Cross-Blue Shield

S. 1456, Introduced by Senator Hill (D., Ala.) and two other Democratic and two Republican Senators, is directed toward the problem of assisting persons to meet the cost of "surgical, obstetrical and medical services, furnished in a hospital, and hospital services incident thereto, not in excess of sixty days in any year, and including diagnostic and out-patient clinic services furnished in a hospital or a diagnostic clinic." It does not include office calls and home care. The central purpose of this bill is to encourage participation in nonprofit prepayment plans for hospital and medical care (e.g., the Blue Cross plans for hospital care and the Blue Shield plans for medical care). Recognizing that some people may be financially unable to pay all or part of the required subscription charges, this bill authorizes the appropriation of sufficient federal funds to match state expenditures for the payment of subscription charges for such persons.

### CATHOLIC DEMURRER HURTS

What may well prove to be the most serious blow suffered by the M-W-D forces so far was delivered last week by three important Catholic organizations: Bureau of Health and Hospitals of National Catholic Welfare Conference, National Conference of Catholic Charities, and Catholic Hospital Association. Jointly they issued a twenty-page printed statement vigorously denouncing national health insurance and proposing, instead, a comprehensive voluntary program whose principles parallel

those of the Taft-Smith-Donnell Bill (S. 1581). The report took insurance proponents by painful surprise, in view of the fact that representatives of NCWC testified in favor of the 1946 Murray-Wagner-Dingell Bill.

Except for Senator Claude Pepper, all of the leading Congressional champions of health insurance are Catholics. That includes Senators Murray, Wagner, McGrath and Chavez, as well as Rep. Dingell. "I haven't changed my position," said McGrath, after digesting the three groups' sharp attack. More defiant was Dingell, quick to point out that the statement does not make faith or morals an issue and lacks the weight of a pronouncement by the church. "It is a result of pressure brought by the doctors," he told your correspondent. "It was not endorsed by the Council of Bishops. What it would do, with its subsidized pauperism of the sick and needy, is lead to the worst kind of stateism to which the church is opposed, in the same manner as the Taft bill."—Washington Report on the Medical Sciences, April 25, 1949.

### SENATOR McGRATH AND HIS BILL

Senator McGrath says "no evidence has been produced" to prove that compulsory health insurance would lower medical standards and put a third party between patient and doctor. To find proof of both assertions, he has only to read the daily news reports from England and the dismal record of every large country which has adopted such a scheme. He will find a story of assembly-line medical methods, increased sickness rates, and over-all inferiority to American health standards.

He also might read his own proposed legislation, which would place at least eight national, state, and local administrative agencies between the patient and doctor, and which would put local administration of the insurance plan in the hands of lay committees in each community. Thus, the way is paved for the invasion of personal privacy and the resulting neighborhood gossip which are plaguing the British system.—R. B. Robins, M.D., May 2, 1949, American Academy General Practice.

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"In Germany, the birthplace of compulsory health insurance, there was one non-medical employe for every 100 insured persons. Our own Veterans Administration has one employe for every ninety-seven beneficiaries. At those ratios, a compulsory health insurance scheme in the United States would require between 1,000,000 and 1,500,000 Government payrollers and administrative costs of at least three billion dollars annually."—R. B. Robins, M.D., Speaker of the Congress of Delegates, American Academy of General Practice, May 2.

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# Editorial Comment

## MAKING WHAT "NEW?"

The nice theory about the administration health bill at Washington is that it sets up a new system of medicine under which everybody will get better treatment quicker and easier, and so cheap he will scarcely notice the cost.

The bad fact about it is that it begins a new system of government on the mistaken supposition that government is an economical and efficient boss which can organize and run private business better than the people themselves can. So that the end of the supposition if put into practice as now proposed is that the government will ultimately have to extend its bossing to whatever is done in private lives that affects health.

Meanwhile nobody has been able to come closer than some billions of dollars in a guess as to what the cost of the proposal as now offered will be.

There are some interesting statistics about death rates, length of life, recent extensions of length of life; conquest of old-time "killer" diseases in this country as compared to any other country.

These figures, it seems, might have some of the attention now being given in Washington to the enthusiastic support of a new system that is so new it contemplates setting up a new scheme of life under federal control.

There are, it is true, certain demands and hopes for a larger extension of medical privileges to the end that modern changes through shifts of population and new standards of living may be more fully served. There is no reason to suppose that these requirements cannot be worked out through private initiative, with co-operation of governmental resource where needed, and where practical, close-at-home management may be had; there is good reason to suppose that federal management can't do it.

When short-cuts to efficiency in matters of health, safety and comfort have been needed the government itself has traditionally relied upon a volunteer agency, the Red Cross, rather than upon the rulebound, tape-encumbered hands of political government.

What we have used to bring progress over social need in our community lives in this country is not a commission from Washington but our own social agencies and community funds.—*Battle Creek Evening News*, May 1, 1949.

## THOSE SELFISH DOCTORS

The American medical profession, excoriated by Mr. Truman and the federal security administrator, the selfless Oscar Ewing, as a bunch of merchants of death, does not appear to have much chance to enjoy its ill-gotten gains. The average age of white males in the United States at the time of death is 67.5 years. The average age of American physicians at the time of death is 67.3 years. Thus the doctors who Truman and Ewing say leave their fellow citizens in neglect are worn out by their labors and die ahead of the rest of their countrymen.

The great New Deal logicians have made the statement that tens of thousands of persons die needlessly in

this country every year because of lack of medical care. Ewing put the figure at 325,000. As noted by the American Medical association, this must include 40,000 deaths from accidents and 115,000 from cancer and heart disease, though a whole convention of doctors couldn't save these victims.

The association found that doctors themselves have no better chance of escaping these hazards than anybody else. Heart disease accounted for 42.2 per cent of deaths among physicians, as against 38.9 per cent of deaths among white males of comparable ages. Cancer, the second cause of death among the population at large, ranked third among physicians, whose training may permit them to recognize the symptoms early and begin treatment promptly. Even so they die of it the same as other people, and in about the same proportion.

It is to be supposed that the Truman prescription for political medicine to save "needless deaths" would also save the lives of physicians who cannot give each other longer lives than they give their patients. If that shouldn't work, Truman might try passing a law saying that all physicians shall live to be 95 so as not to spoil his propaganda.—*Chicago Tribune*, May 1, 1949.

## A DANGEROUS SITUATION

One trouble with the enthusiasts gathered in Washington to defend the administration's medical-reform plan against the charge that it is socialistic is that a good many of them don't care whether it is socialistic or not. Some of them want it to be socialistic and others are fooling themselves with the idea that socialism can't happen to them. They'll be on the outside, they think, picking off privileges and not taking the responsibilities.

This is a dangerous delusion of the times. A recognition that it is a delusion and a recognition that if followed it will hurt plenty and cost plenty is probably the most important need in dealing with the problems of the times.

The delusion proceeds from the notion that socializing one group stops with that group. Experience bears eloquent testimony to the contrary. Socialism begins with favors seemingly wrapped in light controls, but it can only operate when there is rigid government control. That control must extend to everybody involved in the operation of the government's ideas of what needs to be done. Among those who rate importantly are the organizations of workers whose complete co-operation is necessary to the welfare of the planned state.

Discussion and study of the nation's medical needs, at all levels, is worth having in the country today. Undoubtedly some better provision can be made. But in view of present attitudes under cultivation from Washington there had better be a recognition of facts.

Facts are that whenever the government undertakes to do things FOR the public, as affecting daily life and privileges, it must do things TO the public.

And is, by demonstrated proof, an expensive, inefficient and cumbersome boss.—Editorial, *Battle Creek Enquirer and News*, April 17, 1949.

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## Psychotherapy Reviewed

By E. J. Alexander, M.D.  
Detroit, Michigan

THE TERM psychotherapy can be considered to include all the beneficial effects achieved by the personal influence of the physician. The purpose of this paper is to present the steps in psychotherapy in the order in which they ordinarily need to be employed by the general practitioner, with special attention to the common errors made at each step. These will be discussed under four headings: examination, reassurance, explanation, and therapeutic guidance.

### Examination

Diagnosis must always precede intelligent treatment, and that means a medical history and clinical examination adequate to the problem presented by the individual patient. No conscientious physician neglects these procedures in any case; but the busy general practitioner can, without sacrificing accuracy, make the diagnosis in the majority of his cases with a history and examination that are very brief and to the point. Usually, the diagnosis of psychoneurosis can also be made accurately with similar speed; the danger of an experienced physician overlooking a serious organic disorder is not very great, and if something important were overlooked, an alert doctor would probably be able to correct the error by continued observation and re-examination before serious harm could be done. Nevertheless, short-cuts in clinical examination constitute an error in the management of a psychoneurotic patient for this reason: the examination not only serves to estab-

lish the diagnosis but also constitutes the first step in treatment. When the patient observes that the examination is done conscientiously and carefully, he can believe that the doctor will take a sincere interest in his case—the first step in establishment of rapport has been taken. Furthermore, the patient's knowledge that his clinical examination has been thorough will permit him to believe, later, that the doctor knows what he is talking about when reassurance is begun.

Therefore, if time does not permit a thorough examination at first contact with the apparently psychoneurotic patient, the doctor's first step should be to arrange a time for that thorough clinical examination. When that has been completed, psychotherapy will already have begun.

### Reassurance

A major function of the good physician is to allay fear. Obviously, it is often the patient's apprehension about what his symptoms may mean, rather than the severity of the symptoms themselves, which causes him to consult the doctor at all. The mere presence of the physician at the scene of a medical emergency often does more to soothe the patient and take care of the situation than do the treatments administered. And yet it too often happens that the doctor, in dealing with a psychoneurotic patient, causes more fear than he quiets. An unethical practitioner may do it deliberately, in order to sell the patient an expensive "treatment" procedure; but because there is pathological anxiety present, in one form or another, in every psychoneurosis, the most honest and ethical doctor may also do it, unwittingly, by "quibbling."

By the term quibbling, I refer to the remarkable reluctance which exists on the part of many physicians to tell the patient the simple truth, that his

From the Department of Medicine, Division of Neuropsychiatry, Henry Ford Hospital, Detroit, Michigan.



illness is psychiatric or emotional. To be sure, it is probably wise to avoid using psychiatric diagnostic terms, such as psychoneurosis, to the patient, simply because the terms are too much misunderstood; but there is no reason why the doctor cannot state definitely and precisely, "You have no organic (physical) disease; your symptoms are due to nervousness, or to emotional factors." Although the doctor does say something like that, too often (perhaps in an attempt to avoid explaining what "nervousness" and "emotional factors" are) he quibbles. He remarks that he has found something like high blood pressure, or rapid heart rate, or anemia, that "may contribute" to the symptoms. Under these circumstances, the patient's fear about the brain tumor or cancer he thought he had may be quieted, but there has been no real reassurance, for the doctor has simply given the patient something more concrete and specific to serve as a focal point for his anxiety.

The doctor can avoid quibbling if he will avoid the use of the phrase "may contribute." He is the doctor; he is the one to state whether or not a given somatic finding does contribute—and if so, how much—to the general symptomatology of which the patient complains. His honest opinion is all that is wanted. However, we should not forget, too, that even a doctor can sometimes think he is being honest, when actually on reflection he would know that he is merely avoiding a troublesome task by wishful thinking and rationalization. The patient may have two separate and distinct conditions, an emotional illness and a physical one, and the doctor who is too "somatic-minded" will elect to treat the minor physical illness and simply ignore the major emotional illness: "You are nervous, yes; and you don't sleep well at night; but you have a chronic cervicitis. Let's cauterize that and see if you don't feel better." Of course, a good doctor will treat everything the patient needs treated; but it is not our custom, if a patient comes in complaining of urinary retention, to ignore the prostate and sell him instead an operation for removal of his cataracts. We concentrate on the chief complaint or the more serious condition first. When the chief complaints are due to emotional illness, however, some justification for this shift of emphasis by the doctor is to be found in the well-established rule that putting the patient into as good physical condition as possible is itself treatment, to some extent, for the psychoneurosis. However, rationalization and wishful

thinking based on that rule can lead to errors in judgment almost as glaring as this: to cure ringworm between the toes might, by removing one of the infections the body is fighting, perhaps leave the body with more resistance to fight pneumonia; and to cure ringworm between the toes might stop an itching that was one more annoyance to a nervous person, and thus might help him. Such indirect and inefficient ways to cure pneumonia would constitute serious neglect of the patient; such methods based on rationalization rather than serious thought constitute equally serious neglect of the psychoneurotic patient. While the doctor is correcting the minor physical defects, the psychoneurosis, day by day, is becoming more ingrained, and the patient's insight into his emotional life is becoming more and more obscured and confused by the new issues which absorb the attention of the doctor.

If reassurance is properly done—that is, the patient is thoroughly convinced that he does not have wrong with him what he feared he had—it is sometimes sufficient to "cure" him. This is how it works: The patient has not had his basic symptoms modified particularly—for example, pain in the chest or dizziness—but the meaning he had conjured up for his symptom, due to the anxious trends in his personality, has been eradicated; he no longer has a reason to fear "heart trouble" in the one instance, or "stroke" in the other. The state of panic from which he suffered, as long as those serious disorders seemed imminent, is relieved, and the secondary disturbances of physiological function due to that fear are also relieved. He may then feel well enough so that no further psychotherapy is needed.

### Explanation

If a psychoneurosis has become well established, however, mere reassurance is not often adequate to remove the symptoms for very long. The doctor may have given the patient a great deal of reassurance and comfort by stating, in an authoritative and self-confident way, something like this: "You're 100 per cent; your heart, blood pressure, and all your other organs are perfectly normal. There's nothing at all wrong with you. Go home and forget all about your nervousness." The comfort the patient gets lasts only a few days, however; then he is likely to notice that some symptoms remain. Having been told there is "nothing" wrong with him, but knowing that he is "nervous,"

his ruminations may go something like this (not because his thinking is logical, but simply because he is an anxious person): "Could I be imagining all this? The doctor said there's nothing wrong with me, but I feel so odd; and he did say I was nervous. I've heard that nervous people sometimes go insane. Dear me, if I'm imagining all these things I feel, then I must be insane."

Such ruminations and anxieties can be prevented if the doctor will take the time to tell the patient not only what is not wrong with him (reassurance), but also to tell him what is wrong with him—emotional illness. The doctor should explain to the patient how fear and other emotions affect the functioning of the body; he should illustrate with common every-day examples, such as these: embarrassment causes blushing, fear causes tachycardia, anger raises blood pressure, disgust may cause vomiting, grief causes a feeling of a lump in the throat, et cetera.

The main reason why doctors so often neglect that explanation, I think, is because they don't quite believe in it themselves. The doctor, of course, has studied all about the autonomic nervous system, and knows how it controls the function of every organ; but at the same time, he may like to believe that one should not "allow himself to be bothered" by an emotion, and that one should "control his feelings." If so, the doctor has this blind spot in his memory: he has forgotten that the other name the autonomic nervous system bears is the "involuntary" nervous system. By definition, it is not under the control of what we call our will power. The command so often given to the emotionally ill person, "control yourself," may apply within limits to that person's voluntary nervous system: feeling inclined to run from danger, he may stand to meet it; feeling inclined to strike another person in anger, he may instead turn the other cheek; feeling ill at ease or depressed, he may conceal his discomfort from others. However, it is foolish indeed to expect that command, "control yourself," to make any change in the function of the involuntary nervous system. No one of us can speed up or slow down his pulse, blush or cease from blushing, secrete gastric juice or stop its secretion, simply by willing it. Most nervous patients urgently need to meet a doctor who can explain to them that "will power" is not the way to relieve the symptoms of emotional tension, and that to conceal how he feels does not change how he feels. True, he may need oc-

asionally to be encouraged to do his daily activities in spite of how he feels, but the doctor should not imply directly or indirectly that such grim carrying-on is the main principle of psychotherapy.

The three steps in psychiatric first aid so far presented—examination, reassurance and explanation—are so simple and obvious that every doctor can do them, and many patients can be adequately controlled by this program. Several repetitions of reassurance and explanation may be required before the patient fully grasps and assimilates the ideas presented, but when he does understand the nature of his symptoms, he can then to some extent reassure himself. He may feel his heart pound, or feel a pressure in his head, and yet remain relatively calm about it.

### Therapeutic Guidance

It is at the next step in the psychotherapeutic process that most doctors begin to get confused and a little uneasy. That step begins when the patient first asks a question worded something like this: "I understand now that I am physically sound, and that my symptoms are due to fear or some other emotion. But what caused me to become afraid in the first place? What am I still afraid of, enough to make these odd waves of feelings that still pass over me from time to time? My nervousness—that is, my emotional tension—causes my physical symptoms, yes—but what causes my nervousness?"

In order to answer that question, the patient must develop insight, a self-knowledge that he at present does not have. We psychiatrists tell the doctor that he develops that insight in the patient by listening to the patient's life story, but that is not an entirely adequate description of the process of insight psychotherapy. After the doctor knows all about mother and father and Uncle Joe, about bed-wetting and nightmares, about childhood and adult sexual indiscretions, about marriage, childbirth, and economic stresses, and about the fact that mother-in-law is a most unpleasant person, what then? What does it all mean to the doctor? Is it more important that the patient had an alcoholic father who beat the child three times a week twenty-five years ago, or that the patient is right now \$300 in debt? I will try to clarify that by discussing, under three subheadings, what the doctor should learn from the story of the patient's life, and how he uses that information for therapeutic guidance:



1. The life situation: what facts confronted the patient at the time of the development of his emotional symptoms, and what facts now confront him.

2. His personality formulation: what his life situation means to him, in terms of the attitudes he has demonstrated in action throughout his life.

3. The development of insight: understanding the psychological reasons why the symptoms developed.

### The Life Situation

When a patient is permitted by the physician to talk about his personal life as well as about his symptoms, it not infrequently happens that a very circumstantial account of his present life problems is forthcoming. The patient seems to interpret the doctor's willingness to listen as an implied promise that the doctor will solve the problems of the patient. It is as if the patient says, "You are so much wiser than I am, Doctor; tell me what to do." Flattered by this attitude, and not being clear in his own mind concerning his real function in psychotherapy, the doctor may accept the role the patient is offering to him. He may accept the responsibility for solving the real life problems facing the patient, by advising changes in this or that element in the external situation. Usually this is an error in handling the patient. Although situational modification is a form of psychotherapy that does occasionally have distinct usefulness, it is not by any means the cornerstone of psychotherapy. In child psychiatry, by changing the environment or situation the child must face, very good results can be obtained; and, as a temporary expedient in adult psychiatry, the scaling down of the responsibilities of the patient may be desirable, providing that this is coupled with a type of psychotherapy designed to make the patient grow in emotional maturity until he can meet full adult responsibilities with adult self-sufficiency, and make his necessary decisions on his own initiative. No doctor can permanently undertake to be peace-maker, or friend in need, or clever Mr. Fixit for his patient.

Let me illustrate the sort of merry-go-round that usually develops when the concept of psychotherapy the doctor has is limited to the idea of situational readjustment. The doctor may ask, "What do you worry about?" That may set off a harangue that lasts interminably, but which can be summed up, let us say, by, "My mother-in-law

is an unholy terror, and she upsets my emotional balance." The doctor may then say something like, "Your physical symptoms are due to your emotions, in this case anger; your mother-in-law makes you angry; therefore, in order to cure your symptoms, we must do something about changing the mother-in-law situation." The doctor then thinks of every solution he can, but to every suggestion the patient raises a very practical, valid, insurmountable obstacle. Finally the doctor realizes that, after all, the patient is not unintelligent, and if there were any very practical way to get rid of or circumvent the mother-in-law, he would have done it long ago without ever consulting a doctor. Then the doctor may say, "Well, you will just have to stop getting angry at her." To this the patient says, "I do try my best, Doc, but I can't. I'll bet if you tried living with her, you'd get nervous too!" The psychotherapy dwindles down and ends with the doctor saying rather helplessly, "Well, John, I've told you your trouble; your mother-in-law makes your head ache; and so from here on, it's up to you." The doctor has made one slight mistake—it wasn't the doctor but John himself who made that diagnosis, and so the doctor hasn't really "found" the trouble after all.

The psychotherapy proceeds no better, concerning the patient's life situation, when the discussion takes this turn: The doctor asks, "What do you worry about, what are you afraid of?" The patient responds with, "Not a thing in the world except the way I feel. I have nothing to worry about and nothing to be nervous about." That creates a complete impasse for many a doctor. He has contended to the patient that the symptoms are due to nervousness, and the patient contends that there can be no cause for the nervousness except the symptoms. Soon the doctor becomes a little angry because he thinks the patient is concealing something, and the patient feels worse because he senses that the doctor is angry with him. Psychotherapy has ended.

In summary, if the doctor can modify the patient's life situation favorably, he should do so, but that is not his primary purpose in listening to the patient tell his life story. Instead, the important aim of the doctor is to learn what changes occurred, or were about to occur, in the emotional life of the patient at the time the nervous symptoms first appeared. However unimportant the patient considers those situational changes, they should be noted carefully, in order that they may

later be correlated with the attitudes that make up the personality of the patient.

### The Personality Formulation

Although the life situation confronting the psychoneurotic patient, more times than not, cannot be adjusted to his wishes, all is not therefore lost; perhaps the attitudes of the patient toward his situation can be changed. Since, in any given situation, no two people ever think, feel, or act exactly alike, it follows that situations and attitudes must always be considered reciprocally—one has no meaning without the other. The approach of marriage may be to one girl a time of great bliss; to another it may represent a desperate attempt to seize the only man available to her before she reaches the fateful age of thirty. One prospective father may swell with pride; another may be disturbed by the fear that the coming infant will be a rival for the affections of the only woman who has ever paid any attention to him. A promotion to one employe may mean a way to balance his budget; to another it may mean a quaking fear of the added responsibility or of the jealousy of his former associates. One speech-maker may enjoy the chance to strut; another may be paralyzed by fear. To one person a glass of water is half-full, and to another it appears half-empty.

The doctor learns to know what attitudes make up the personality of the patient during the time the patient tells his life history. As he tells how he has reacted to numerous situations in the past, he is indirectly indicating how he thought and felt in those situations. His habits of thinking, feeling, and being moved to act are the psychological, or inner, realities (as distinguished from the external realities of his life situation) which we may group under the general term "attitudes"; and, taken all together, these make up his personality formulation. When the doctor begins to understand the patient's personality, the doctor will then be able to surmise what that particular person must have thought, how he must have felt, and how he must have been moved to behave in the life situation facing him at the time he became ill. The doctor's correlation of those inner realities with the external realities permits him to begin to understand what problem the psychoneurotic symptoms were developed to solve; he knows even better than the patient what is "bothering" him.

The common error in psychotherapy that occurs

at this stage comes about because the doctor proceeds too rapidly to present his interpretations to the patient. The patient invariably then begins to feel that the doctor is criticizing him, no matter how tactfully and kindly the doctor speaks. Admittedly, the doctor is trying to get the patient to change himself, which seems almost the same as finding fault with the patient as he is. There is a difference, however. Psychotherapy consists of letting the patient find his own "faults," the inner psychic realities that cause him pain to contemplate—that is, thoughts, feelings, and impulses that are inconsistent with his concept of an acceptable personality. The doctor's function is to provide the emotional climate in which this painful self-knowledge and insight can occur, and to point the directions in which the patient shall search himself. Although any person will admit to the general proposition that he is something less than perfect, he nevertheless suffers more or less pain whenever one of his imperfections and inefficiencies is specifically pointed out to him. There is a "resistance" to that self-knowledge; and it works out, as a general rule in psychotherapy, that the patient cannot gain important self-knowledge until an emotional compensation for the pain is available. That compensation is to be found in the total acceptance and understanding which the doctor gives him, in the rapport which exists between doctor and patient.

Mere knowledge of that principle is not enough, however. Errors such as the one just mentioned—trying to force insight upon the patient before he is ready for it—come about more often not because of lack of knowledge of the theories of psychological medicine on the part of the doctor, but because the doctor is not adequately prepared emotionally to do insight psychotherapy. By gesture, tone of voice, or direct statement, the doctor is certain to betray his own feelings toward the patient many times during their meetings; and if those feelings are not the right ones, the therapeutic results will be poor. The doctor's ability to remain understanding, friendly, and non-critical toward the patient is the emotional force which overcomes the resistance of the patient to the painful insight which is curative. In order to maintain that attitude, the doctor must possess tact, patience, and human warmth, and he must have an interest in psychological medicine and adequate time that he can give unreluctantly to such patients. It is not hard for the doctor to decide whether or not



he has those attributes. However, it is much harder for him to be aware of certain other attitudes within himself that may interfere with his efficiency in psychotherapy. To illustrate the point, I will discuss two such attitudes that seem particularly important to me.

The doctor must learn to avoid our habitual learned tendency to categorize behavior and thinking as either "good" or "bad." Instinct, in man as well as in animals, is dynamic, forceful, moving, but is essentially independent of morals. Within all of us, impulses arise from our instinctual nature that move us toward selfish, sensual, lazy, cruel, aggressive, dishonest, adulterous and other "bad" behavior; but we are also moved at other times, by the same instinctual force, toward unselfish, self-sacrificial, tender, loving, protective, ambitious, strong, kindly, faithful, and other "good" behavior. The force is as natural as rain, and whether its effects are "good" or "bad" depends entirely upon a person's point of view toward it and the usage he makes of it. Before a person can be thoroughly aware of the implications of this amorality of instinct, he usually needs to have studied carefully the effects of instinct upon his own thinking, feeling, and behavior. Fortified with that self-understanding, he is then protected against feeling (and unwittingly betraying to the patient) repugnance and squeamishness when his patient first comes face to face with the "bad" side of the instincts within himself.

A second insight the doctor needs is into the workings within himself of the instinct to power. This is an inner compulsion to exhibit one's own strength, ability, skill, intelligence, and power, at the expense of whoever is most conveniently available. We have already given an example of this force at work, in the doctor who tried to force insight upon the patient too soon. He knew better, and yet he behaved as if he considered his task as therapist to be the pointing out of the patient's faults. He did not accomplish the aim he consciously intended, of giving the patient insight; but he did "succeed" in making the patient feel humiliated, criticized, and in the wrong. Therein is the clue to what went wrong with the therapy. The doctor's own emotions tricked him into putting the patient in a position of inferiority, or, worded the other way, into putting the doctor in a position of superiority.

The workings of this force need to be considered very carefully by the general practitioner who

wishes to add insight psychotherapy to his treatment methods. Doctors in general are accustomed to expect their patients to obey orders without question, and to expect that the infirmities shall yield promptly, most of the time, to the treatments administered. The doctor daily seems to demonstrate to himself that he has power over the patient and power over disease. This is an extraordinarily subtle temptation to yield oneself to the power "devil," and forget humility; and it is, I think, the main reason why doctors, as a group, are more resistant to the teachings of depth psychology than are most other intelligent and educated persons. They want nothing to do with it, because it demands of them that they give up the illusion of being in "control" of the medical situation. To be sure, the doctor usually does retain his humility, perhaps by remembering with Ambrose Pare that he merely dresses the wound while God heals it, or by remembering that the man-made improvements on the healing power of nature which he uses, such as surgery, penicillin, and diphtheria antitoxin, are merely his heritage from the accumulated efforts and knowledge of thousands of people. If his pride does become too great, the course of events will usually chasten it in a painful way—having assumed the full responsibility for the good effects his treatments have, he may come to suffer a compulsive intensity and serious-mindedness in his practice that takes away his pleasure in it, or he may become plagued by a sense of inadequacy, failure, and guilt because he also must then accept the full responsibility for the times his treatments fail to give a perfect result. But that discussion refers to pride and humility as general, long-term attitudes; it is more pertinent for the doctor undertaking self-appraisal, before doing insight psychotherapy, to ask himself to what extent he has an inner need for the day-to-day subservience, obedience, and "worship" of his patients. It may help him answer that question of himself if I give a few examples of how it works. The doctor makes light of the patient's symptoms, saying, "Ah, that wouldn't bother me (—but since it does bother you, I must be stronger than you are—)." The doctor scoffs at the patient's inability to see the "common sense" solution to his problems and to act "reasonably." "Why, of course, anyone with common sense (—such as I have and you obviously don't have—) would do thus and so about it." The doctor is angry when the resistance of the patient makes him reject an

explanation the doctor has offered. "Of course, I know there is such a thing as 'resistance,' but. . . (—it should not be as strong as your respect for my great psychological knowledge—)." The doctor is angry because the symptoms of the patient do not disappear as rapidly as he wishes or expects. "(—I am a very clever doctor and I have treated you perfectly and it is therefore your own perversity that keeps you from getting well—)."

We may leave this subject with the comment that to do successful insight psychotherapy, the doctor must understand himself at least as well as he understands what is going on in the patient's psyche.

### The Development of Insight

I will recapitulate what the doctor has learned by now about the patient: by making a correlation between the patient's life situation (the external realities) and his personality—as demonstrated by his habits of thinking, feeling, and acting in the past—the doctor is able to surmise how the patient must have thought, felt, or been impelled to act at the time the symptoms developed. The final task consists in leading the patient to an awareness that he did in fact think, or feel, or have an impulse to act in a certain way, and that the symptoms he has developed constitute a solution, although an inefficient one, for the conflict between that inner psychic reality (the thought, feeling, or impulse) and the external realities of the life situation. That awareness becomes possible, not through reasoning and argument by the doctor, but by a train of thought association that cannot be foreseen by the doctor. All of us have had the experience of having our memory stimulated by another person, concerning a fact in the past; although it sounds vaguely familiar, it does not have force until, of a sudden, some trivial detail "clicks," and we can say, "Yes, now I remember. Your speaking of the taxi reminded me that I noticed that the taxi driver's hands were blue with the cold and I wondered why he didn't wear gloves." Something similar occurs in insight psychotherapy. Hypnotism, the interpretation of dreams, and discussions with the patient under the partial influence of a hypnotic drug are methods the psychiatrist can use sometimes to learn more rapidly the particular associative links which the patient needs as a key to his memory, but the same results can be obtained by urging the patient in the fully conscious state for his thought associations

to a particular theme that seems significant to the doctor.

When psychiatrists say that such insight, once the patient does acquire it, is curative, it usually leaves the non-psychiatrist shaking his head doubtfully. How can self-knowledge cure anything except self-deception? That's exactly right—that's what it does cure. To be sure, the problem which the patient originally solved by self-deception is usually still present, but it can then be faced by the ordinary methods we all use to meet our unhappy moments. The patient may still be unhappy, but he won't be sick.

It is a fundamental concept in modern dynamic psychology that man does not "know" his own motives nearly as well as he likes to believe. Since that concept applies to normal persons too, it applies to the doctor; and the doctor is usually as "resistant" to accepting the concept, when it is first presented to him, as is any neurotic patient. I cannot attempt to overcome that resistance here and now by presenting all the details of psychopathology, but I do wish to say enough on this theme of self-deception to outline why it occurs and how it causes symptoms.

The self-deception comes about because the patient experiences a certain thought, longing, or impulse which is too dangerous or guilty to entertain. He wants to act in a certain way—or more accurately, the life force within him, or his instinctual nature (the "id" in psychoanalytic terminology), "wants" him to act in a certain way—but he has learned to believe that if such action slipped out in word or deed, it would result in great danger to himself or great loss of the esteem of others. He is overwhelmed by the conflict between the taboo need on the one hand, and his need for security and/or affection on the other hand. As long as the taboo need makes itself known to him through thought, longing, or impulse, he feels fear, shame, or guilt. To rid himself of those unpleasant feelings, he tries to rid himself of the psychic fact—the thought, longing, or impulse—that has intruded itself unwanted by his personality but "wanted" by his instinctual nature. (To clarify this use of "want," the starving man does not "want" to be hungry, because it is painful, but the life force within him "wants" him to be fed and forces him by the pain of hunger and the thought of food to take some sort of action.) The patient tries not to think the fearful thought, not to want the shameful thing, not to do the guilty



act. He may be successful in putting the thought, the longing, or the impulse "out of his mind"—that is, he may become unaware of the fact that it ever existed. In psychiatric terminology, it has become unconscious. But the fact that he has become unaware of those particular thoughts, longings, or impulses has in no way lessened the force of the instinctual need originally responsible for them. Awareness of the need may not exist, but the need itself does. The behavior (including, under that term, action of the autonomic nervous system as well as action of the voluntary nervous system) developed to secure partial, indirect, or substitute satisfaction of the need, while preserving unawareness of the taboo part of the need, constitutes the psychoneurotic symptomatology. The "mental mechanisms" (such as repression, regression, symbolization, rationalization, displacement, and others), whereby the dual aim of need satisfaction and defense against awareness is accomplished, may be studied in any text on psychopathology. It is only necessary to note here, again, the reasons why there is "resistance" to giving up the symptoms. In the first place, fear, shame, or guilt of almost overwhelming degree must be experienced as awareness of the taboo psychic material is approached; and so the awareness must be approached slowly, with security, tolerance, and understanding being constantly provided by the physician. In the second place, the substitute satisfaction of the instinctual need, inefficient and painful as it may be, is still a greater force upon the patient than is the prospect of no satisfaction at all; and so the patient cannot give up his "secondary gain" until the way is open for him to seek his instinctual satisfactions, with some chance of success, in a more acceptable way.

It is easier to show by some simple examples how self-deception makes a person ill, than it is to show how self-knowledge makes him well. For instance, a girl is blessed with normally functioning glands, but she long ago learned that sex activities or sex thoughts of any kind were extremely dangerous. They would mean severe censure from her parents, or punishment; and the degree of fear she feels is determined not so much by the reality of the punishments her parents would actually use, but rather by her conception of the punishment which would ensue. This conception is subject to fantastic exaggeration and misinterpretation in an immature mind. In order to avoid her fear, she keeps from sex activity; in order to

avoid temptation in that direction, she avoids sex thoughts; in order to keep such thoughts from being aroused, she avoids contact with boys; to avoid this, she gives up thinking of marriage; to avoid this, she avoids seeing married people; to avoid this, she stays fearfully at home, perhaps being panic-stricken except when mother is there with her. Yet no matter how thoroughly she secludes herself, she cannot stop her glands from functioning. The stronger the biological drive and the more dangerous its satisfaction appeared to her, the more numerous the thoughts, longings, and impulses she must try to push out of her mind; and when adult living begins to force her to walk a little beyond the psychic barriers she has erected, she then feels fear. It is not her life situation (the fact that sexual experience is a normal and natural part of adult living), nor is it the biological drive within her toward mating, but rather it is her self-deception, her attempt to conceal from herself that this biological drive exists, which causes her fear. Because she is unable, through acquired fear, to think about a normal husband-wife relationship and must deceive herself about wanting it, about the only satisfaction her need for affection can find is in regression—clinging like an infant to her mother.

As another example, we may think of a woman who is acting as a nurse to her invalid father. She may be doing that job out of a deep and sincere love for him, or she may be doing it so that he will leave her \$10,000 in his will. If the motive is pure, 100 per cent love, no matter how hard she works at it, her physical fatigue will not be complicated by nervous fatigue, because she will receive an emotional satisfaction from the work itself. However, if her motive is truly avarice, and she conceals this fact from herself, believing that her work is a labor of love, she will find herself becoming strangely fatigued, tense, irritable at the task. She will force herself to work at it more diligently and conscientiously than is really necessary, and yet will feel a continual sense of guilt that she is really not doing enough for him. Eventually her symptoms reach the point where there is some neglect of the old man, or her irritability causes her to say bitter and cruel things to him, which then further increases her sense of guilt and her nervousness. Eventually she consults a doctor, who probably agrees with her that she "can't" do the job of nursing the old man, because of her nervousness, and he advises a situational

readjustment which relieves her of the burden. The truth of the matter is that she unconsciously did not "want" to nurse him, but she does "want" the \$10,000; and therefore, any situational readjustment the doctor suggests which endangers that legacy is not going to satisfy the patient and relieve her nervousness. Let us consider how the matter would go if the woman honestly could admit to herself that she did not love her father, as she had been taught she "should," but was moved instead by love for his bank account. She might then find the job tiring, but it would not be a source of conflict which would take her to the doctor. She would keep on doing it if it was worth the money; and if it was not she would tell the old gentleman with perfect equanimity to hire himself a nurse and cease bothering her. It is not the situation (the invalid father) nor the psychic fact (her avarice and lack of love for her father), but it is her self-deception about the psychic fact which makes her uncomfortable.

The final error which requires consideration is this: the doctor is not quite specific enough in his own mind concerning his goals in therapy for a particular patient. In a brief way, I will outline here three levels of psychotherapy:

*Supportive Psychotherapy.*—The doctor may resolve that the best he can do is to help the patient hold on to his present partially decompensated state, which has apparently characterized him for years. He resolves to give the patient emotional support (reassurance, tolerance, understanding) and guidance. This is good therapy, for it helps the patient to feel more comfortable, and it protects him from complete helplessness in situations he is not strong enough to meet alone, but the doctor should recognize that this is not really insight psychotherapy. It implies that the doctor has decided that, for one reason or another, it is not practical for this patient to reach a state of emotional self-sufficiency; he cannot do without someone to be his counsellor, confessor, and understanding friend in need, and the doctor takes over that function. This is the type of psychotherapy for which the old-time family physician was justly famous. He had one advantage over his modern successor—he did not have to listen to his patients so much, because he already knew them intimately. With that one modification—taking time to get the whole story—the modern general practitioner can do just as well. Obvious-

ly advice, situational adjustment, and symptomatic medication hold a much larger part in this type of psychotherapy than they do in insight psychotherapy. The doctor must also play the very important role of protecting his patient from unnecessary operations and all forms of expensive charlatanism.

*Brief Insight Psychotherapy.*—The doctor may decide to give the patient insight into a relatively superficial conflict. This implies that the symptoms are relatively recent; that the patient has demonstrated a personality with good adjustment capacity to the requirements of adult living; that the doctor believes the insight necessary is one which constitutes a relatively slight offense against accepted social customs; and that the doctor believes the patient has good "ego strength." It is hard to define that term accurately, but the slang term "he can take it" is a good approximation. It means that the patient is able to accept unpleasant facts about himself, and see their truth readily, without being overwhelmed by shame or guilt. Under these circumstances, the doctor uses reassurance and explanation, listens to the patient's complete story, and supplements his information with direct questioning; then he proceeds to present directly to the patient his interpretations about what the patient has said, and his surmises about what the psychic material was which led to the symptoms. Of course, the doctor must present these in a tentative way, rather than as an established fact; and whether or not this procedure works depends not only upon the doctor's adeptness at making accurate interpretations and surmises, but also upon the resistance which exists to the particular insights which are necessary. If the procedure works, this "brief psychotherapy" (from one to ten or twenty treatment hours) is very gratifying both to doctor and patient. However, if the doctor's interpretations cannot be accepted as they are given, no harm is done if the doctor has been discreet, tactful, and tentative in his presentations. The doctor need not conclude that his interpretations are necessarily incorrect; it is more likely that it is the patient's resistance which constitutes the obstacle, and the length of psychotherapy will not be as brief as the doctor had hoped.

*Character Modification.*—All too often it becomes apparent that, although the symptoms are



of recent origin, they merely represent the final breakdown of an emotionally determined attitude which has existed for many years but is no longer tenable. An example of this is to be found in the psychologically determined depressions of the middle years of life. The headache or nervous indigestion of recent origin is seen to be related to the failure of a compulsive success-striving which has existed since earliest life; and while that attitude could pass as laudable ambition and initiative as long as new worlds were continually being conquered, it becomes sooner or later a goad which takes the joy out of living. The apparent symptoms which first bring the patient to the doctor are like the top of the iceberg—much lies hidden beneath the surface. To modify such emotionally determined attitudes which support the symptoms is a major undertaking. There is nothing brief about this, for these attitudes rest upon the same self-deception which later symptoms do, but the self-deceptions occurred at the time the attitudes were laid down, many years ago. These emotionally determined attitudes are defenses against awareness and partial satisfactions of psychic material which existed in an immature mind. Insight into these is the task undertaken by formal psychoanalysis. The beginner in psychotherapy would be unwise to attempt insight development at such depth; he needs voluntarily to restrict himself to working at the depth where he is himself comfortable.

### Summary

1. Examination establishes the clinical diagnosis and prepares the way for psychotherapy. The examination must be thorough.
2. Reassurance tells the patient what he doesn't have, and allays secondary fear—the fear of his symptoms. The doctor must take care not to raise new fears while he is quieting old ones.
3. Explanation further allays secondary fear by giving the patient enough understanding so that, to some extent, he can reassure himself. A failure at this step is usually caused because the doctor himself does not quite believe in the involuntary nature of the autonomic nervous system.
4. Insight psychotherapy begins when attention is directed to the patient's emotional life, and inner, psychic experiences. From the material, the doctor learns about the life situation of the patient and about his personality formulations. By a correlation of these, the doctor gains preliminary

insight into the patient's problem and learns in what direction to stimulate the thought associations of the patient.

5. Situational readjustment is sometimes helpful, but it is not the cornerstone of psychotherapy.

6. When evaluation of the personality of the patient is attempted, the errors which develop usually come about because the doctor does not understand his own personality workings adequately. The doctor must have not only the time for and an interest in psychological medicine, but also he must understand himself at least to the same depth to which he intends to understand his patient.

7. Insight, or self-knowledge, is curative because every psychoneurosis rests upon self-deception. Since not all patients are suitable subjects for the deepest insight, it is necessary that the doctor have clearly in mind his therapeutic goals for the particular patient.



### POLITICAL MEDICINE IN CALIFORNIA

For a third time, Governor Warren is advocating a compulsory health insurance program for California. In a message to the legislature January 3, he claimed that millions of people in California cannot pay for adequate medical care "without crippling their finances and without depriving themselves of other things that are needed to raise a good American family."

He urged legislative adoption of a system of "health insurance to which everyone contributes and through which everyone will receive benefits in time of sickness."

The program would be financed, in part, by compulsory payroll taxes, referred to as "contributions" imposed on employers and employees.

The existing Department of Employment and a newly created Health Service Authority would administer the act. This authority would include the director of public health as chairman, the chief executive officer of the Department of Employment, three physicians, two representatives of labor, two representatives of employers, and one dentist, the last eight members being appointed by the governor.

Each physician who participates in the program will presumably have to determine at his peril what is or is not a material fact. Failure to disclose by physicians and by others is also declared to be a misdemeanor, as is also willful violation of any rule or regulation promulgated or published to effectuate the program.

### NEW OFFICERS

At the meeting of the Detroit Dermatological Society on May 18, 1949, the following officers were installed for the year 1949-50.

President—Dr. Frank Stiles, 2012 Olds Tower, Lansing 2, Michigan.

President-elect—Dr. Arthur E. Schiller, 2010 David Broderick Tower, Detroit 26, Michigan.

Secretary-Treasurer—Dr. Herbert H. Holman, 2010 David Broderick Tower, Detroit 26, Michigan.

Recorder—Dr. Hermann Pinkus, 12 East 4th Street, Monroe, Michigan.

# The Rise in Hospital Costs

By E. Dwight Barnett, M.D.

Detroit, Michigan

THE COST of hospital services has increased rapidly over the last ten years. It is questionable whether hospital cost has risen out of proportion to the cost of other desirable commodities and services. I do not believe it has. Those who complain about the high cost of hospital care have been known to budget stringently over a long period of time for an automobile costing twice what it did a decade ago. On the other hand, these same people have refused to provide for a service which would actually save their lives. The hospital bill always comes to these people at a time when they are least able to pay it.

Perhaps the most important factor responsible for rising hospital costs is an ever-increasing payroll. Payroll, once 40 per cent of the hospital dollar, now accounts for approximately 70 per cent. The old concept of an eleemosynary institution was that those who worked therein, in effect, made a contribution to charity and, therefore, could not expect compensation equal to that which could be obtained in industry. Today it is argued, and with logic, that a hospital, in the process of bestowing charity, should not create charities in the form of underpaid workers.

Whether this be actual public opinion or not, hospitals have been forced to substantially increase wages all along the line in order to maintain a foothold in the labor market. Orderlies, once paid \$45.00 a month with maintenance, now have a starting salary of \$150.00. Other employees in the hospital, as well as the technically trained and professionally trained, show a similar salary history.

Changing medical practice has also affected hospital costs. The public now realizes the beneficence of early ambulation, resulting in a shorter hospital stay. Yet the public has not been aware of the effect a shorter hospital stay has had on hospital costs. Hospital value received still means "room and board" to the average citizen. "Why should three days in a hospital cost sixty dollars, while the best hotel charges twenty?" he asks.

What is not realized is that the first few days of hospital care are the high cost days. During this

short period the acutely ill patient may require all the facilities of the hospital. Highly trained personnel, working in expensively outfitted laboratories such as blood bank, hematology, bacteriology and serology, serve the patient, yet he is seldom aware of it. Additional personnel are called upon to administer a variety of costly medications.

When the practice of medicine progressed from the "little black bag" to the hospital, the cost of medical care increased. It further increased when the high cost hospital days could not be prorated to the lower cost convalescent days that followed. A high concentration of acutely ill patients in our hospitals today means they must bear full cost of the few days they are in the hospital.

Hospital educational programs, once thought to be a source of cheap labor, are actually financial liabilities, further increasing hospital costs. Student nurses once supplemented professional nursing to the extent that fewer registered nurses were required. Now, however, hospitals must hire a complete staff of nursing personnel as well as pay for the cost of nursing education. In addition to intern and nursing education, hospitals now find they must train a large variety of personnel to meet the ever-increasing demands of advancing medicine. Teaching hospitals unquestionably are high cost hospitals. Curtailing this vital activity would compromise the hospital's responsibility to its community.

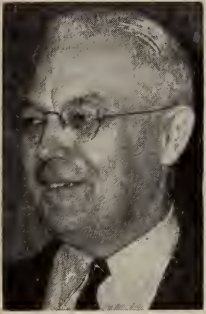
In meeting the problem of rising costs, hospitals must receive additional income, whether it be from the patient (his life was saved, but the coffee was cold), government sources, or private philanthropy. However, this is not the whole answer. We must borrow the techniques of industry in effecting economies in the production of well patients.

A tremendous job lies ahead of us in the education of hospital personnel. Those professionally and technically trained, often considered poor managers, must be made dollar conscious. Lavish use of supplies and equipment does not insure adequate medical care—their economic use should not connote lower standards, the cry commonly heard. Hospitals like automobiles are said to be priced out of the market. Such a statement is justified only where inefficiency and waste exist.

Dr. Barnett is director, the Harper Hospital, Detroit, Michigan, and president of Michigan Hospital Service.



# Veterans Care Program



GUY F. PALMER

**E**ARLY IN the fall of 1945, a small group of Detroiters met in the headquarters of the Wayne County Medical Society to discuss the pyramiding problems of medical care for veterans of World War II.

Demobilization of the armed services was in full swing, and hundreds and thousands of veterans were being discharged daily to return to civilian life. Many of these veterans still suffered from the effects of battle injuries and disease. Many would require medical care for months and, perhaps, years to come. Under laws passed by Congress it was the government's responsibility to provide this medical care, but the question of how this was to be done remained to be answered.

In the group that met that day in Detroit nearly four years ago were representatives of veterans organizations, Michigan Medical Service, civic leaders, doctors and Veterans Administration officials.

Heading the VA representation was Guy F. Palmer, manager of the Detroit Regional Office, the federal agency charged with the actual administration of medical and other benefits to Michigan's veterans of all wars. Dr. Stanley W. Insley, then president of the Wayne County Medical Society, was spokesman for the professional group.

Discussion soon centered around a startling new plan that had been conceived by the Michigan Medical Service. Under this plan the entire medical profession in Michigan would be organized to participate in the treatment of disabled veterans, with VA paying the bills through the Michigan Medical Service. When representatives of the Michigan Medical Service revealed details of their plan to Palmer, they found a ready and willing sponsor in the person of the local VA chief.

A veteran of World War I, Palmer had been with the VA since 1922 and had faced a somewhat similar problem at that time. He fully realized however, that the medical problems arising out of World War I would be magnified many times over after World War II, and no one knew better than he that the VA was in no position to handle

the situation without a lot of help from the entire medical profession.

With Palmer lending his full support, Michigan Medical Service proceeded to iron out details that would make the plan workable. State and county medical societies threw their support behind the movement, and as 1945 drew to a close the Michigan Medical Plan was completed.

But there were to be many trying days ahead, and at times it seemed that the "Plan" might be lost in a maze of chaotic confusion. The original contract, providing a set schedule of fees, was drawn up by the Michigan Medical Service in conjunction with state and county medical societies and was forwarded to VA Central Office in Washington. It was turned down flat. Weeks passed with little encouragement from other states, but the proponents of the Michigan Medical Plan continued their efforts to put it into effect. The contract was revised and again sent to Washington.

This time it was approved by Dr. Paul R. Hawley, new head of the VA Medical Service.

On January 15, 1946, the Detroit VA office authorized the first treatment under the Michigan Medical Plan. One year later, treatments were averaging from 6,000 to 7,000 a month, and to date Michigan physicians of the veterans' own choice have administered about 300,000 treatments under authorization of the Detroit VA.

With the "Plan" now well into its fourth year, Palmer looks upon "hometown treatment" as a permanent part of the VA operation.

"It has succeeded only because of the wholehearted support and co-operation of everyone involved," Palmer said recently. "That includes Michigan's doctors, the Michigan Medical Service, the veteran himself and, of course, our own (VA) Medical Division."

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*Senator Harry P. Cain*, Republican of Washington, said politically controlled medical systems "hamstring both doctors and patients with a frustrating maze of Government regulations and serial number medical methods. Those who suffer are the people who are really sick and who need careful, personal attention at the proper time, not at a time and in a manner prescribed by a Government clerk or a mimeographed regulation. The inevitable, tragic result of such an impersonal system is a progressive decline in the people's health."

# Narcotherapy in Psychosomatic Disorders

By George S. Evseeff, M.D.

Traverse City, Michigan

WITH THE EXPANDING knowledge of the role our psyche plays in the production of somatic symptoms as well as the somatic disorders influencing our psychic states, we are faced with the problem of adequately and appropriately dealing with them. Once it is ascertained that etiological factors in a given case are emotional and lie in the domain of the psyche, we are immediately presented with the problem of selecting a proper psychotherapeutic approach. Psychotherapy can be facilitated by various pharmacological agents which have a specific action on the central nervous system. One of these agents is sodium amytal, which when administered intravenously modifies the psychic state to such an extent that the patient becomes more amenable to our psychotherapeutic endeavors.

In 1930, Bleckwenn<sup>2</sup> introduced the use of sodium amytal into the field of clinical psychiatry. He first used it to produce sedation in disturbed psychotic patients and later observed that it produced lucid states in hitherto inaccessible patients. Later discovery led him to utilize sodium amytal for the prognostic evaluation of psychotic patients as well as for the purpose of differentiating neurosis from psychosis.

Lindemann,<sup>9,10</sup> in 1932, carried out extensive research in studying psychological changes produced by sodium amytal in so-called normal and abnormal individuals. He worked out a technique of using the drug in pre-narcotic doses (3 to 7 grains administered intravenously) to produce the stimulating effect. According to him, the normal individuals as well as psychoneurotics under the influence of sodium amytal reacted by developing a feeling of well-being and serenity and became more confidential and willing to discuss their intimate emotional problems, with a feeling of relief following such catharsis. The psychotic patients reacted by becoming more friendly and some of them emotionally warm. It did not seem to influence the structure of delusional ideas or hallucinations which were part of the patients' clinical

pictures. In normal individuals, it did not produce delusions, hallucinations or dreamlike experiences. However, if abnormal thoughts were present but not previously expressed, they were likely to be brought out into the open.

Horsley,<sup>8</sup> in 1936, introduced the term narcoanalysis for the technique of employing a barbiturate intravenously to facilitate psychotherapy. His theory included both biochemical and psychodynamic concepts, in that barbiturates so administered tended to depress higher cortex and diencephalon, with resulting diminution of the conscious state enabling a patient to release anxiety-laden attitudes which otherwise would have been too painful to permit their conscious expression. Horsley used a variety of barbiturate derivatives, such as nembutal, evipal and pentothal.

Wilbur<sup>16</sup> used sodium thioethamyl intravenously, which is an ultra-short-acting drug. He feels that this drug aids in the establishment of a good relationship between the doctor and the patient, and makes the latter more accessible to psychotherapy.

Grinker<sup>4,5</sup> was the first one to use the term narco-synthesis. He believes that abreaction under the influence of sodium amytal is not sufficient in itself, as far as successful treatment of neuroses is concerned. He also stressed the quick establishment of transference towards a therapist, which has to be followed immediately by psychotherapy.

Barbara<sup>1</sup> divided narcoanalysis into two phases: the first stage consists of the development of transference and the analysis, and the second stage consists of interpretation of the material produced and the synthesis. As a result of synthesis, the patient is likely to become more self-assertive, emotionally independent of childhood fixations, and to arrive at some level of normal interpersonal relationships. Resolution of the transference is easier since the patient depends upon the drug for his sense of well-being and relief from emotional tension.

Wagner<sup>14</sup> and others utilized stimulating doses of sodium amytal to aid psychotherapy based on reassurance and suggestion while the patient was under influence of the drug.

Herman<sup>6</sup> succeeded in restoring memory in six cases of hysterical amnesia where other methods failed.

Reitman<sup>12</sup> described a different technique of using sodium amytal, called hypnoanalysis. In a darkened room, the patient was given enough

Read at the monthly meeting of the Mecosta, Osceola and Lake County Medical Society, June 1, 1948.



sodium amytal to almost put him to sleep. Caffeine was administered hypodermically twenty-five minutes later. Reitman felt that with sodium amytal hypnosis there was an impersonal connection and the patient's personal prejudices were not brought into play, so that course of treatment was not endangered, as may occur in ordinary hypnosis. He felt that evipal was not suitable as it had only narcotic effect without any stimulation.

Hoch<sup>7</sup> used sodium amytal as well as pentothal in the treatment of certain psychosomatic disorders and anxiety states. He administered the drug once a week, and the total number of sessions varied between ten and twenty-five. He made full use of suggestion and psychic catharsis, and his results were gratifying with the patients suffering from peptic ulcers, tachycardia, mucous colitis and head injury neurosis.

New and Kelley<sup>11</sup> came to the conclusion that sodium pentothal was more suitable for acute disorders, and sodium amytal for the usual cases. They also felt that narcosynthesis is more effective if the drug is given in the morning. As a safety measure, they routinely administered atropine sulfate to decrease the possibility of laryngospasm.

Brasier and Finesinger<sup>3</sup> carried out encephalographic studies on the patients who received sodium amytal intravenously. They observed fast frequencies and found that high-voltage fast activity appeared first in the frontal leads, then in the parietal leads and last in the occipital leads, and that it disappeared in the reverse order.

### Method and Material

The present report is based on observations and experiences with 100 patients in the Traverse City State Hospital who received sodium amytal intravenously, according to the technique described below. The particular aspect of sodium amytal administration which is emphasized in this paper is its use as an aid to psychotherapy in psychosomatic disorders.

1. The patient must be comfortably lying in bed.

2. The technique of injection is similar to that used in ordinary intravenous anesthesia, except that the injection is given very slowly. A 10 per cent solution of sodium amytal (sodium isoamyl-ethylbarbiturate) in distilled water is injected in the antecubital region and the rate of injection should not exceed 1 c.c. per minute.

3. During the first few minutes of injection of the drug, the patient is repeatedly told to relax and that he is going to feel pleasantly drowsy without actually falling asleep. Thus, the state of sodium amytal narcosis is augmented by the verbal suggestions which lead to establishment of a hypnotic-like state in the patient. The average patient begins to talk spontaneously after he receives 4 to 6 grains of sodium amytal.

The patient is encouraged to talk freely and as much as he wants to, but if he becomes so drowsy that he is not able to talk, he is given 1.5 to 3.0 c.c. of metrazol intravenously to waken him. Ordinarily, it is not necessary to resort to the use of metrazol, if the sodium amytal is injected slowly enough to avoid this undesirable state of deep narcosis.

### Contraindications and Toxicity

Since the amount of sodium amytal used to produce the narcotic state is very small, there are only a few contraindications for its use, among which the main one is an extensive liver disease. Also, sodium amytal should not be administered to patients with fever and extremely low blood pressure. Smaller amounts should be used in old people and persons with advanced cardiovascular diseases.

Toxicity of the sodium amytal is very negligible. The drug is oxidized by the liver and is completely eliminated in eighteen to twenty-four hours. A few investigators have described occasional cases of idiosyncrasy to the drug, chiefly manifested by skin conditions and neurological disturbances. Horsley states "No case is recorded of a single therapeutic dose, even in an idiosyncratic patient, having a lethal effect."

### Cases

*Case 1.*—A twenty-five-year-old, white, married woman was admitted to the hospital in an acute state of anxiety, with chief complaints of palpitation of the heart, feeling of dizziness and shortness of breath. Physical examination was essentially negative except for tachycardia, dyspnea and generalized trembling of the body. Routine laboratory studies and x-rays of the chest were negative. The electrocardiogram revealed a rate of 110 per minute, with sinus control, and all complexes within normal limits. No pertinent information concerning the psychodynamics of the case was revealed in the initial psychiatric interview. The patient had difficulty in expressing herself because of dyspnea, was extremely preoccupied with her somatic complaints and expressed resentment toward the doctors who could not find any organic condition to account for her distressing symptoms. She was

extremely evasive when questioned about her marital life. Shortly after admission, she was given a series of sodium amytal interviews, according to the technique described above. During the second interview, she revealed the fact that not long ago she had been sexually attacked by her father-in-law and that she had withheld this information from her husband. In the subsequent interviews, much of the important material was obtained pertaining to traumatic experiences in her childhood and early adolescence. She had received no instructions concerning the nature of sex and was totally unprepared at the time of onset of menarche. Her father repeatedly told her that she should beware of the boys because they were always ready to take advantage of an innocent girl. In high school, she was a self-conscious timid girl who avoided boys despite her strong desire to be like other girls. Two years after graduation from high school, she married a man twelve years older than herself. The marriage was a happy one except for the fact that she remained frigid and unresponsive during intercourse, which was performed on rare occasions. Her functional symptoms gradually disappeared during the sodium amytal interviews, and after she developed insight and understanding of the psychosomatic nature of her illness, she rapidly improved and left the hospital symptom-free.

*Case 2.*—A forty-five-year-old, white woman, who had had attacks of asthma for the past twenty years, came in with chief complaints of a feeling of suffocation, insomnia and nervousness. Medications, including adrenalin, gave her only partial relief, and a change of climate did not benefit her at all. She was immensely preoccupied with her somatic complaints, but during the sodium amytal interviews she was able to release a lot of repressed hostility toward her husband, who resented the patient's close emotional attachment to her mother. The onset of her first attack of asthma coincided with an attack of pertussis that her oldest child developed in the first year of life. At that time, she had a difficult time adjusting to married life and felt lost without her mother. Narcoanalysis further revealed that besides dependence on her mother, the patient felt ambivalent toward her. Strong sibling rivalry existed between the patient and her younger brother, who was her mother's favorite. The latest episode of asthma occurred at the time when her mother became seriously ill and the patient was afraid that she might die. As a result of narcotherapy, the patient gained insight into the interrelationship between her asthmatic attacks and her emotional dependence on the mother, following which she reported marked improvement of all her symptoms.

*Case 3.*—A thirty-four-year-old, divorced, white woman came in with the chief complaint of pubic itching. It developed five months after she was married and was particularly noticeable at bedtime. She was treated by several physicians who could not find any organic cause for it. Under the medical care of a woman physician for about a year, she was relatively free of her symptoms, but the improvement was of short duration since the physician moved away from town and no further contact was made. During the initial interviews, she was tense and anxious, feeling extremely sorry for herself. She

was quite reluctant to discuss her childhood memories, stating that she could not remember anything significant that might be connected with her present difficulties. She also gave only one reason for divorcing her husband, that being his uncontrolled drinking. She was given sodium amytal intravenously, and during the ensuing ten weekly sessions she spoke spontaneously about her fears and anxieties, and was able to recall some of the traumatic emotional experiences from her earlier life. Although she was divorced from her alcoholic husband, she still loved him. Her father was an alcoholic who abused and mistreated his wife during his drunken bouts. Her mother was a passive, submissive type of woman who was suffering from her own neurotic conflicts. The patient finally was able to express her strong feelings of guilt in connection with masturbation, which she practiced up until the time of her marriage. She had never received any form of sex instruction from her parents and had entered marriage full of fears in relation to sexual intercourse and possible pregnancy. Despite fairly intensive psychotherapy, she was unable to develop sufficient insight to benefit her to any great extent. She obtained only partial relief following narcotherapy and discharged herself from our services.

### Discussion

The precise mode of action of intravenously administered sodium amytal on the central nervous system has not been definitely ascertained. The primary action seems to be on the higher cortical centers, without direct effect on glands, smooth muscles, peripheral vascular and neural systems. The outstanding features of it are alterations in the state of consciousness, increased suggestibility and a state of hypermnesia. The observed changes in patients' attitudes and emotions were quite similar to those encountered in persons who are under the influence of alcohol. Thorner and Herman believe that it is due to suppression of the higher cortical inhibitory centers. According to our observations, patients under the influence of sodium amytal become quite drowsy, but communicative, with a tendency to be less inhibited and more apt to reveal suppressed emotions with a minimum amount of anxiety. In addition, they usually have a mild flight of ideas, hypomania and in some instances euphoria. From the psychotherapeutic view, two states merit special consideration, one of increased suggestibility and another of hypermnesia, which may aid materially by shortening the time required to complete the treatment.

The above-mentioned psychological changes can be advantageously combined with various types of psychotherapy, depending upon the nature and severity of the emotional disorder. By the term psychotherapy, we mean everything that may be



done by the physician in order to favorably influence the feeling and thinking of the patient in a way that will lead to the better adjustment of the latter to his or her environment. In any psychotherapeutic setting, this doctor-patient relationship is the most important single factor. Rapport was a popular term used to describe such a relationship, later superseded by the term transference. Transference is a tendency in human beings to relate the emotional attitudes that have developed in their past to the people in their present environment. When this transference is established, the patient sees the doctor not at all as he is, but more or less in the role of one of those individuals who figured significantly in the patient's childhood. When a fundamentally positive relationship exists between the patient and the therapist, catharsis can take place more readily. If a therapist plays the role of a benevolent and permissive parent, the patient is not afraid to express his hostile feelings and infantile libidinal strivings which are not ordinarily accepted or approved. Under the influence of sodium amytal, intensity of anxiety, associated with those unacceptable drives, is not only lessened but can be controlled and regulated by varying the amount of drug administered. As soon as the patient becomes aware of his unresolved emotional conflicts perpetuating themselves from the early days of childhood, he commences to develop insight or understanding of his true self. This invariably is followed by an improvement in the patient's condition. Re-educative psychotherapy must be continued until it reaches the emotional level of acceptance by the patient of his conflicts rather than the intellectual one.

There are no special criteria for selection of the patients for narcoanalytic treatment. Anxiety hysteria and conversion hysteria frequently are amenable to narcotherapy. A large percentage of psychosomatic disorders are based on the psychodynamic principles involved in the above-mentioned neuroses. Recent reports in the literature describe favorable results with narcoanalysis in the treatment of cardiac and respiratory neuroses, various psychosomatic disturbances of the gastrointestinal tract such as peptic ulcers, mucous and ulcerative colitis. Narcotherapy has provided us with a brief psychotherapeutic tool for dealing with acute anxiety states where a conversion of anxiety into somatic symptoms is the predominant feature. One case of cardiac neurosis, one of mucous colitis

and three cases of psychogenic asthma were successfully treated by this method. One schizophrenic patient who suffered from asthma prior to the onset of acute psychosis responded exceptionally well to the combined insulin coma treatments and narcoanalysis.

### Summary

1. A brief review of literature dealing with the intravenous use of barbiturates in the field of clinical psychiatry was presented.
2. One hundred patients were studied from the diagnostic, prognostic and therapeutic standpoint, according to the technique described in this paper. Chief contraindications and the toxicity of sodium amytal administered intravenously were discussed. In our series, no complications were encountered.
3. Three cases were selected as illustrations for the use of sodium amytal narcotherapy in the treatment of psychosomatic problems.
4. The use of intravenous sodium amytal as an aid to brief psychotherapy was discussed. Three cardinal principles of psychotherapy, relationship, catharsis and insight, were defined and their dynamics were described in relation to the narcotherapy. Usefulness of narcotherapy in the management of anxiety states, conversion hysteria and various psychosomatic disorders was mentioned.

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# The Climacteric and Its Management

By Howard H. Cummings, M.D.

Ann Arbor, Michigan



THE FUNCTION OF reproduction in the human female gradually declines in the latter part of the fourth decade and usually is completely lost in the early part of the fifth decade. During this period of time, menstruation occurs at lengthening intervals and in lessening amounts until

it ceases entirely. Accompanying the gradual cessation of menstruation, atrophic changes occur in the external and internal generative organs. These atrophic changes, which are easily demonstrable, markedly affect the ovaries, thereby causing a temporary imbalance of the endocrine glands. The ovaries play the leading role during a woman's reproductive life, assisted by the pituitary gland and possibly the thyroid and adrenal glands. While our knowledge of the part that each gland plays is still incomplete, there is scientific proof that the close interrelation of the endocrine glands is disturbed when one gland is impaired in its function. In time nature re-establishes a satisfactory endocrine balance.

This critical period in a woman's life—when the power of reproduction is lost and menstruation gradually ceases, when atrophic changes take place in the generative organs and the endocrine glands are thrown into a state of imbalance—is designated as the climacteric. The term *menopause* is frequently used by both physicians and laymen to designate this period of time and change, but scientifically it is not correct. Literally, *menopause* describes only one prominent objective sign of the climacteric. By usage, however, the two terms have come to be accepted as synonymous.

The multitudinous symptoms experienced by women during the climacteric are difficult to explain on the basis of an endocrine imbalance alone, but when disturbances of the autonomic and peripheral nervous systems are reviewed in relation to endocrine crises, the explanation of the symptoms of the menopause becomes clearer. As a

matter of fact, the most prominent symptoms of this period fall into two groups: first, psychic symptoms; second, disturbances of the autonomic and peripheral nervous systems.

Under the heading of psychic disturbances are: emotional instability, melancholia, weeping, morbid worrying, insomnia, fatigue, self-depreciation, self-accusation, jealousies, suicidal thoughts, lack of concentration, and impaired memory.

Common symptoms attributed to disturbances of the autonomic and peripheral nerves are: hot flashes, chills, attacks of sweating, palpitation, dyspnea, vertigo, headaches, paresthesias, pruritus, and hyperesthesias. These lists are far from complete, but they do enumerate the most frequent symptoms of the menopause.

It would be simple for the physician, when confronted by such an extensive and complicated symptom-complex as the patient relates, to explain all of the disturbances on the basis of menopausal changes. However, during this same period, numerous diseases may appear and in their several courses produce all of the symptoms mentioned. The degenerative and metabolic diseases, such as arteriosclerosis and hypertension, cardiac and kidney diseases, diabetes, obesity and anemias, develop during the forties and fifties. Malignancies and benign tumors of the pelvic organs frequently appear. Menstrual disturbances, especially menorrhagia and metrorrhagia, often occur. Thyroid deficiencies or hyperactive states are seen during the climacteric, and neuroses and psychoses often make their initial appearance or recur at this critical time. These facts make it imperative when women complain of supposedly menopausal symptoms that physicians record complete histories and make thorough examinations.

The medical management of the woman in the climacteric may be very simple, or it may require all of the physician's resourcefulness, skill and judgment. Not all women require medical attention during this period of life. There is a wide variation in the statistics on this important question. Norris estimates that 90 per cent of healthy women go through the climacteric without experiencing any symptoms which interfere with general health or domestic and social activities. A contrary view is expressed by Hawkinsop, who estimates that 75 per cent of all women experience distressing symptoms during the climacteric. Estimates similar to Hawkinsop's in this country range



from 65 to 85 per cent. But all statistics dealing with the frequency of disturbing climacteric symptoms are only estimates. No accurate figures are available. Nevertheless, physicians who are consulted by women in this age group know that a large proportion of these *patients* have distressing symptoms attributed to the climacteric.

The picture of the menopause is beclouded in the minds of many women by superstitions and old wives' tales. Among the most common misconceptions are that the sexual life of the woman ceases at the menopause, that her usefulness to her husband and family is largely ended, that numerous and fatal diseases will attack her, and that the climacteric and senescence are synonymous.

Many times the only medical attention required by these patients is a reassuring consultation in which misconceptions are cleared away, and in which the physical changes taking place and causing the syndrome are explained. But this consultation should be delayed until the physician has satisfied himself by a careful history, a thorough physical examination, and all of the clinical tests necessary, that disease is not present and causing the symptoms.

Knowledge of psychology and psychiatry is often essential to the successful treatment of patients in the menopause. No group makes more demands upon a physician's time or requires so much reassurance and personal encouragement. In fact, many cases with predominating psychic symptoms need the attention of the psychiatrist. The psychoses appear, and self-destruction may occur when women develop mental depression, groundless suspicions and jealousies, lose interest in their normal activities and accuse themselves of uncommitted and unpardonable sins. Patients who develop involutional melancholia—an exaggeration of the menopausal complex—with suicidal tendencies should be treated in institutions by trained psychiatrists.

Most women in the climacteric suffer from relatively mild symptoms. In order of their frequency, Hawkinson lists the symptoms as follows: nervousness, menstrual disturbances, flushes and chills, excitability, fatigue and lassitude, depression, irritability, insomnia, tachycardia, vertigo, decreased memory and concentration, headaches, frigidity, numbness, tingling, and sweating. Fortunately, most of these symptoms may be alleviated or banished entirely by modern hormonal therapy.

Many estrogen preparations are available to the physician today. Most of them are effective. Each practitioner has favorite preparations and methods of administering them. Individual differences in response to drugs make it necessary to try our varying dosages. All of these drugs fall into one of three groups: first, natural estrogens (estrone, estradiol); second, synthetic (diethylstilbestrol, hexestrol, benzestrol); third, chemically modified natural estrogen to increase their effectiveness by slowing down the rate at which they are absorbed. For this purpose natural estrogens are combined with benzoic propionate or palmitic acid. Solid estrogens in pellets and crystalline forms, when injected under the skin or into muscle, will likewise delay absorption.

Time and experience have served the medical profession well in evaluating newer methods of treatment. This is especially true of estrogenic therapy in the climacteric. Medical opinion today concerning the use of the estrogenic drugs in the management of the menopause is not unanimously in favor of them, but some generally accepted ideas and methods are now well established and extensively followed.

The estrogenic hormones obtained from natural sources are known to be well tolerated by women whether given by the oral, subcutaneous, or topical routes. However, they are expensive and when used for months or, as sometimes happens, for several years, they cause an economic burden on the patient. Yet the synthetic estrogens, though just as effective in producing favorable responses, are more irritating and toxic, but because they cost less they are available to all women needing them. Nausea and vomiting, which are the most common ill effects of the synthetic preparations, may be overcome by small doses given with food or upon retiring, or by omitting the drug at intervals, or by sedation accompanying the medication. When the natural or synthetic estrogens are suspended in oily media for hypodermic use and are given by this method, local irritations sometimes occur. Skin sensitizations and general allergic manifestations may also be produced.

In beginning treatment with estrogenic agents, the dosage should be sufficient to alleviate the symptoms or to cause their prompt cessation. Too small doses will make the patient lose confidence in the efficacy of the drug. Large doses, however, should not be continued; rather they should be

reduced as rapidly as possible to a point where the subjective symptoms are held in abeyance. From time to time, for short intervals, the medication may be stopped to test the patient for recurrence of the symptoms. Caution should be used, however, not to stop estrogen treatment suddenly or for too long a period of time. A sudden withdrawal of these drugs will produce uterine bleeding. Overdosage with estrogen may likewise bring about troublesome bleeding. When this occurs in women who have ceased menstruating, the physician is faced with the diagnostic problem of ruling out malignancy of the uterus. Frequently a diagnostic curettage is necessary to answer this question.

No definite plan of estrogen therapy can be given, for each woman reacts in a different way. Most women in the menopause show exacerbation of symptoms in monthly cycles, or at gradually lengthening intervals. Medication may be increased and decreased to meet these cycles. During the early period of treatment it is preferable to have the patient visit her physician for consultation and reassurance. A hypodermic injection of a crystalline preparation may be given at the time of the office visits. In certain cases these treatments may supplement oral administration. The estrogens, whether natural, synthetic or chemically combined, which may be taken by mouth make up the most generally used and most valuable drugs for treatment of the climacteric. Once the proper dosage is established, the oral route is most convenient for both patient and doctor. Patients using these drugs, however, should have constant medical direction throughout the whole time of treatment. Physicians should gradually withdraw these drugs and warn their patients not to resume taking them without medical advice.

Are there any contraindications to the use of the estrogens in the climacteric? Women who have malignancies or have had previous treatment for malignant disease should not be given estrogenic therapy. There is one exception to this almost inflexible rule. Older women with advanced malignancies and metastases in the soft parts of the body obtain palliative relief from their suffering by this treatment, but are not cured. Usually cancerous neoplasms are lighted up and their course accelerated by the administration of estrogen preparations. They should never be prescribed until the absence of malignancy has been

determined. There is no definite proof that any of the estrogens cause cancer.

Women who have endometriosis or adenomata of the uterus usually improve in health and often become free from symptoms as the climacteric draws to an end. Excessive bleeding and pain, however, may reappear under estrogen therapy.

Thompson believes that women with fibromata of the uterus should not be given estrogens during the menopause as they may cause profuse hemorrhage. Opposed to this view is Karnaky who advocates the use of large doses of diethylstilbestrol, 25 to 250 mg., injected directly into the anterior wall of the uterus to stop functional bleeding and hemorrhages due to fibroids. He believes that by raising the estrogenic blood level above the estrogenic bleeding level, the hemorrhage is checked.

Certain menopausal patients are overstimulated by estrogenic therapy and all of their symptoms exaggerated by it. These women should be treated by other means. Estrogen preparations may cause addiction. It is not unusual to find patients who seemingly cannot do without these drugs and have taken them for a number of years without professional advice. At times they present themselves to physicians because of profuse bleeding brought on by overdosage or sudden withdrawal of the drug. Usually a diagnostic curettage is necessary to rule out malignant changes in the uterus. Following a gradual withdrawal of the drug, substitute therapy must be instituted. Prolongation of the symptom-complex of the climacteric may be caused by unnecessary and too long-continued estrogenic therapy. Periods of gradual withdrawal of the drug should therefore be prescribed. If the symptoms disappear or are not troublesome, all estrogens should then be stopped.

During the climacteric women who have menstrual disturbances, such as premenstrual spotting, menorrhagias and metrorrhagias, present many difficult problems to the attending physician. Treatment of this group is hazardous unless, by examination, pelvic pathologic conditions are ruled out. Estrogenic therapy often is unsuccessful and radical procedures are necessary. Transfusions of blood, curettage, intra-uterine radium, deep x-ray therapy and hysterectomy are sometimes required to manage profuse bleeding of the menopause. Certain medicines, however, may be tried, often successfully, before using operative means. Extract of thyroid is especially useful. Well-tolerated doses



may be maintained for long periods of time, but while the patient is using this hormone, signs of toxicity must be watched for and basal metabolic rates determined.

Androgens are not foreign to the blood stream of women, and they may be of great value in treating menstrual complications of the climacteric. The medical profession has been frightened by reports in the literature of masculinizing effects of the male sex hormone. It is true that large doses of these useful androgens will cause hair to grow on the face, a lowering of the voice, atrophy of the breasts, and even enlargement of the clitoris. About 400 mg. of testosterone propionate, given in a period of one month, will produce masculinizing effects, but rarely is it necessary to give over 250 mg. of the androgens a month in the treatment of menopausal bleeding. Twenty-five mg. of testosterone, given by the hypodermic method three times a week, will lessen bleeding, and 10 mg. of metandren by mouth two or three times a week is sufficient to reduce the blood loss from adenomata and fibromata complicating the climacteric. The androgens find their greatest use in gynecology when patients have had previous malignancies or functional bleeding treated by x-ray, radium or surgery, and estrogens have been contraindicated. Androgens relieve troublesome menopausal symptoms. Hot flashes frequently are checked by the use of these hormones. All masculinizing signs disappear within a few months after discontinuation of the male sex hormone.

A useful group of drugs for the climacteric are the barbiturates. No other treatment is necessary in some cases, and when they are given with the estrogens, the dosage of the female hormone may be greatly reduced. Doses of  $\frac{1}{4}$  gr. of phenobarbital given one-half hour before meals and 1 gr. at bedtime may give complete relief from symptoms.

Many physicians experience great difficulty in weaning menopausal patients away from the estrogen preparations. Christy, in 1945, recommended vitamin E in menopausal therapy in place of estrogen. Personal experience of over two years duration has confirmed his claims. Women in the menopause are effectively relieved of vasomotor instability. There are no stimulating effects, and it does not cause changes in the genital organs or the breasts. It is well tolerated and has no bad side effects. It may be that the beneficial

effects of vitamin E are purely psychological. Perhaps this is just a placebo. However, when ephynal acetate in 10 mg. doses is given three times daily, many menopausal patients are entirely relieved of their disturbing symptoms.

After a period of months or years, women in the menopause gradually realize that their peculiar and troublesome ailments have disappeared. They feel unusually well. Ambition returns, and they take their active places again in the home circle and in society. If free from organic disease, they can look forward to many more years of usefulness and happiness. The gratitude of these women is a source of professional satisfaction to physicians who have patiently and skillfully led them through this trying time.



#### TEMPEST IN A TEAPOT

The affair of Private Dolan is explained by four large paper clippings. Supt. Shaw and Dr. Farrand did not agree—the doctor resigned. There was a charge of neglect of Private Dolan. It was charged the patient had been compelled to wait four hours in the hall without medical treatment. Dolan was a private in the Fifth Regiment with a fracture of the shoulder blade. The regiment surgeon sent the patient in thinking that Gen. Pingee had arranged for the use of the hospital. The hospital authorities were charged with asking where the money for his care was coming from. The delay was because Dolan had been sent in from Island Lake with a letter to Dr. Farrand who could not be located for three hours according to this Superintendent, who is reported in the paper to have said, "Dr. Farrand is a nominal member of the staff and beyond the spirit of ill will manifested his resignation isn't of any consequence. I guess the institution can get along without him." *Evening News*, Detroit, May 5, 1898. From an old scrap book at Harper Hospital.

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#### FIND ANTIBIOTIC EFFECTIVE AGAINST VIRUS PNEUMONIA

Virus pneumonia responds favorably to aureomycin, according to Gordon Meiklejohn, M.D., Berkeley, Calif., assistant professor of medicine at the University of California Medical School, San Francisco, and consultant in virology for the California State Department of Health, and Capt. Robert I. Shragg, who made a controlled study of the newer antibiotic drug as a treatment for this virus disease of the lungs.

No previously available drug has been found effective against virus pneumonia.

# Acute Bacterial Endocarditis Complicating Pregnancy

By George N. Ferris, M.D., and  
Clarence E. Toshach, M.D., F.A.C.S.  
Saginaw, Michigan

THERE IS A notable paucity in the literature of reports concerning acute bacterial endocarditis complicating pregnancy, particularly in recent years. Undoubtedly, the almost routine use of antibiotics with the onset of fever has cut down the chain of events that leads to this dread complication. However, we feel that occasional cases will continue to challenge the skill of the obstetrician and the internist. The following case is being presented in the hope that our efforts may be evaluated and that others may succeed where we failed.

## Case Report

M. L. G., a seventeen-year-old Mexican woman, was delivered of a normal full-term baby on July 29, 1946. Labor was short and uncomplicated. The postpartum course was uneventful. She did not have another menstrual period. The patient visited her physician early in her second pregnancy for diagnosis, but she did not see him again until the onset of labor on November 2, 1947, when she was admitted to Saginaw General Hospital. She complained of fever and malaise and had a temperature of 101.6°. The patient gave no definite history of recent upper respiratory infection, but her husband volunteered that she had a cold for several days prior to hospitalization. She denied any history of rheumatic fever, heart trouble, nephritis, or other serious illnesses. The patient had never been operated upon. The menstrual history was not remarkable.

The physical examination revealed a small, well-developed, fairly well-nourished Mexican woman who appeared toxic and acutely ill. Her skin was clear and warm to touch. No petechiae were seen in the skin or conjunctivae. Small nodes were palpable in the anterior and posterior cervical areas bilaterally. There was moderate edema of both upper eyelids. The tonsils were enlarged but did not appear infected. The lungs were clear. The heart was slightly enlarged to the left. There was regular sinus rhythm, with no murmurs and no thrills. The fetus, apparently near term, was presenting by vertex, and the fetal heart tones were of good quality. All reflexes were within normal limits.

Empirically, the patient was started on penicillin and given sodium sulfadiazine intravenously. Shortly after admission, the patient went into labor spontaneously and was delivered of a normal, slightly toxic, premature

infant. After a stormy course, the baby went on to full recovery and is in good health at the present time.

The mother developed a temperature of 104° the day following delivery, November 3. It climbed to 105.2° the following day. At this time the patient complained of aches in the arms, neck, and left hip. There was moderate abdominal distension. A harsh, blowing systolic murmur was heard over the mitral area for the first time. Petechiae were noted in the conjunctiva of the left lower lid.

Chest rays taken at this time were negative except for left ventricular hypertrophy. The Widal test was negative, and the heterophile antibody was not diagnostic. After consultation with the medical department, it was decided that septicemia and bacterial endocarditis were the most likely diagnoses, and blood cultures substantiated this. Three successive cultures on November 4, 5, and 6 proved positive for staphylococcus aureus with hemolytic properties.

On November 6, vaginal bimanual examination disclosed no pelvic abscess or induration. The following day the patient appeared somewhat improved clinically, except that the respirations were short and grunty in character and the temperature remained septic in type. There were a few crepitant râles in both bases. The abdominal distension continued. On November 9 she complained of severe pain in the left flank. There was marked tenderness over this area.

Blood culture on November 13 was again positive for hemolytic staphylococcus. Chest x-rays obtained on November 21 revealed prominent bronchovascular markings bilaterally. X-Rays of the thoraco-lumbar area showed no metastatic abscesses.

Her fever continued to be of the picket-fence variety, fluctuating about a base line of 104°. The patient's condition gradually deteriorated. She lapsed into a semicomatose state and expired on November 25.

Laboratory work showed a negative Kahn and a positive Rh factor. Urinalyses were obtained regularly, and at all times a trace of albumin was present. There was never any sugar or acetone in the urine, and only a few white blood cells and occasional red blood cells were noted. The blood hemoglobin was not less than 76 and as high as 84 per cent during the illness, and the red blood count ranged from 3,950,000 to 4,520,000. The white blood count varied from 13,650 to 19,750. The polymorphonuclears fluctuated between 88 and 97 and the lymphocytes from 11 to 13 per cent. The nonprotein nitrogen on November 18 was 22.5 mg. per cent.

**Therapy.**—On admission the patient was started on 40,000 units of penicillin every three hours and was given 5 grams of sodium sulfadiazine intravenously. On November 4 the penicillin was increased to 60,000 units every three hours, and sulfadiazine was given in doses of 15 grains every 4 hours. The patient received 500 c.c. of whole blood on November 4 and again the next day. Between November 8 and 24 she was transfused with 250 c.c. of blood on ten occasions. On November 8 the penicillin was increased to 150,000 units every two hours, and sulfadiazine, grains 7½, and sulfamerazine, grains 7½, were administered every four hours. Since the pa-

From the Department of Obstetrics and Gynecology, Saginaw General Hospital.





Fig. 1. Vegetative endocarditis.

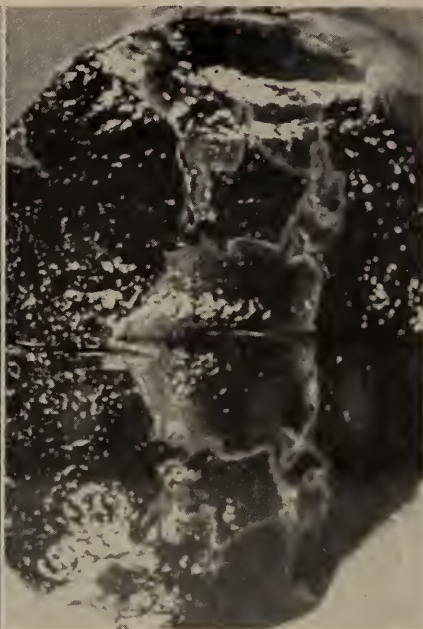


Fig. 2. Splenic infarct.



Fig. 3. Kidney infarct.

tient was not responding to penicillin and the sulfonamides, streptomycin, in doses of 0.5 gram every three hours, was started on November 4. On November 24 the penicillin dosage was increased to 500,000 units every three hours. The patient received a total of 33,360,000 units of penicillin, 42,500,000 units of streptomycin, and 3,500 c.c. of whole blood. During the course of the illness, the fluid balance was maintained with intravenous fluids.

*Postmortem Examination.*—Only the significant findings will be noted. There were numerous petechial hemorrhages in the conjunctivae. There was extensive congestion and edema of the lungs. The heart weighed 200 grams. The valves were not remarkable except for the mitral. On this valve were found two large friable vegetations, each measuring 1.5 cm. in diameter (Fig. 1). These were firmly attached to the valve cusps and separated for a distance of about 5 cm. Sections through the vegetations showed them to be composed of fibrin and clotted blood. There were large masses of bacteria present, along with numerous inflammatory cells. Necrosis was prominent throughout this tissue. No evidence of previous endocardial disease could be found. Myocardial sections showed small areas of focal necrosis with collections of inflammatory cells and degenerating muscle fibers.

The liver weighed 2,200 grams and was markedly congested. The spleen, weighing 708 grams, was covered with adhesions. Visible through the capsule was a large infarcted area which occupied about one half of the splenic surface (Fig. 2). Sections through the infarct showed complete necrosis of the splenic tissue. It was rather sharply demarcated from the adjacent splenic stroma.

The kidneys weighed 200 grams. Numerous petechial hemorrhages were noted on the surface. In the right

kidney there were two yellowish infarcted areas in the midportion, each measuring 1.5 cm. in diameter. The left kidney contained one infarct in the lower pole. Microscopic study revealed these infarcted areas as regions of necrosis which were sharply delineated from the adjacent renal parenchyma (Fig. 3).

Petechial hemorrhages were present in the bladder mucosa. In the uterine cavity and extending down into the cervix there was a large piece of dark, friable hemorrhagic material which appeared to be placental in character. This was firmly attached to the boggy uterus. Sections showed this to be a piece of necrotic material which was largely fibrinous and in which shadowy chorionic villi could be identified.

## Discussion

Hoyt states that acute bacterial endocarditis is uncommon, occurring in well under 1 per cent of all types of heart disease. In 1945, Hoyt and Bissel<sup>5</sup> reported a case of staphylococcus endocarditis treated successfully with penicillin in doses of 10,000 units every two hours for fourteen doses, or a total dose of 1,680,000 units. Blood culture was positive up to the eighth day, then permanently negative. Dolphin and Cruickshank<sup>2</sup> reported on six cases of acute bacterial endocarditis treated with penicillin in total dosages of 646,000 units to 2,300,000 units. Three patients lived and three died. Two of these cases were due to staphylococcus aureus. One survived and the other eventually succumbed.

Koletsky<sup>6</sup> feels that acute bacterial endocarditis is not an uncommon occurrence in puerperal

septicemia. He reports that Matthews and Phillips found seven instances of acute endocarditis among fifty-five cases of septic abortion. Hamilton and Thomson<sup>4</sup> reported that in fifty consecutive post-partum examinations of patients who died of puerperal sepsis, fresh endocardial vegetations of number and size to warrant a diagnosis of acute bacterial endocarditis were found in five.

We have been unable to find in the literature any cases of acute bacterial endocarditis complicating pregnancy that were treated with our newer antibiotics. Our case was submitted not only to add to the meager literature on the subject but also because of several interesting points that were brought up.

When did the patient develop her endocarditis? We feel certain she had it the day following delivery, when we first heard the loud systolic murmur. Whether the patient had already developed septicemia and was accumulating vegetations on the mitral valve when admitted, or whether there was a large scale invasion of the blood stream by the staphylococcus immediately after delivery, we cannot say. If the latter is true, we must admit that at least some strains of staphylococcus can attack a previously normal heart in the presence of penicillin.

What was the relation between the retained secundines and the bacteremia? At first we felt that we might be criticized for not curetting the uterus, in spite of the persistently high fever. However, the uterine retention of pieces of placenta and membrane is not uncommon, and few of these cases ever develop puerperal sepsis. We refrained from curettage in the belief that the only effect would be dissemination of the infection.

Would larger doses of penicillin given earlier have altered the outcome? It is lamentable that we were unable to obtain a penicillin sensitivity test on the organism. We administered gradually increasing doses as the patient showed no signs of responding. It is possible that we were only building up the immunity of the staphylococcus to the drug. Miller<sup>7</sup> states that some strains of staphylococcus are comparatively resistant and a few highly resistant to penicillin. This is due to the ability of the resistant strains to produce penicillinase, an enzyme which inhibits the effectiveness of penicillin.

Given this case to treat again, we would certainly employ larger doses of penicillin as soon as the diagnosis was established. We are looking forward

to further reports on the battle between penicillin and the virulent staphylococcus that attacks the valves of the heart.

The authors are indebted to Drs. Lohr and Bucklin of the Department of Pathology for their aid in presenting this paper.

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## STRONG LEADERSHIP

Although the community has a right to expect strong leadership from the medical profession in removing the economic shock from the cost of medical care, doctors cannot do this alone.

Doctors are eager to develop voluntary insurance against costs of hospital and medical care and are increasing their co-operative efforts with labor, management, and with community leaders to do so.

Health must be earned—it cannot be received as a gift. Millions of families have to be taught how to live a healthy life in their homes. One-half the chronically ill are in their present condition in large measure because of ignorance, willful neglect, or failure to observe and practice even the most elementary principles of hygienic living.

Their condition is not, as some are led to believe, primarily due to past failures in our medical facilities. Prevention of disease by developing sound health habits on an individual basis in the schools is money well invested for any community.

Only by attachment to a family doctor, whether he practices alone or with a group of his colleagues, will people have the advantages of positive health supervision and the early and comparatively inexpensive detection of serious illness when it can be most successfully treated.—J. R. MILLER, Trustee AMA.

## SPELL IT THIAMINE, SAYS VITAMIN AUTHORITY

"Approved spelling" for the chemical name for vitamin B<sub>1</sub> is thiamine, not thiamin, says Dr. R. R. Williams of New York, who first synthesized this vitamin. In a note to *Science* (May 20) he says he is asked periodically about the spelling.

"Thiamin" is the spelling he suggested in 1937, shortly after he had synthesized the chemical. Later, however, the U. S. Pharmacopoeia adopted the spelling, "thiamine," adding the final "e" to indicate the chemical characteristics of the compound. Chemical and medical journals have now followed this lead.—*Science News Letter*, June 4, 1949.



# Random Relationships of Experimental Embryology and Genetics to Pathology

By Stanley P. Reimann, M.D.  
Philadelphia, Pennsylvania

IF WE TRANSLATE into general terms the basis of the microscopic pathologic diagnosis of tissues, we would call it part of the differentiation and organization problems. We attempt in pathological diagnosis to name a given process, and from this name implications flow both forward and backward. Thus, in the case of tumors we attempt to state not only from which tissues a tumor arises, for this is a gross diagnosis, but also microscopically, from which cells. On the other side, from our opinion as expressed in a name, we give a prognosis, that is, we make a prophecy as to what would have happened had the piece of tissue not been removed, and what in all probability will happen provided the surgeon has not removed the lesion in toto.

Furthermore, in many instances the etiology of a given lesion is implied in the name given, whether that be the tubercle bacillus in a tuberculous anatomic lesion or a granulosa cell tumor of the ovary when a periductal fibroma of the breast appears in a woman past the menopause.

With all the complications, it is a wonder (if this is a scientific term) that pathologists can do as well as they do.

You will notice that the word "name" appears frequently in the above. Without laboring the point it is apparent that names are extremely important in understanding, not only with our clinical confreres but even among ourselves. There has grown up in pathology a language of its own, sometimes difficult to understand even among pathologists and often difficult to reconcile with the terminology of the basic science on which pathology rests, namely, biology.

It would seem that the more our language coincides with that of the basic subject, the more understandable it would be to others as well as ourselves, and the more flexible it would be as new facts and concepts arise in the whole subject of biology. It is interesting to note that at least attempts are being made to clarify the language of

pathology in both the fields of hematology and neoplasms.

As stated, it is with the differentiation of cells and the organization of tissues that we deal primarily. By differentiation is usually meant the change from the more general to the more specific. There are all degrees to this "more specific," and in this are crucial points of many a problem.

Biologists generally do not like the terms "potent" or "potencies," but they have no agreed substitute for them. Therefore, we might define them as the possibilities within a cell. In pathology we use the term "totipotent," meaning that all of the tissues and cells of a given organism can be developed from such a cell. Such a one is the fertilized ovum, or, by parthenogenesis, an unfertilized ovum. Differentiation begins quite early in certain species—even in the fertilized ovum—and in other species begins later, perhaps not until the sixteen-cell stage has been reached. The terms for these two contrasting ova are mosaic and regulatory. Of course, differentiation has already occurred in all ova and spermatozoa before union, for their maturation may be considered a type of differentiation.

If differentiation toward the formation of a new organism begins immediately in the fertilized ovum, removal of parts leads to defects in the completed organism. If, on the other hand, the ovum is regulatory, and differentiation has not proceeded, removal of parts is "regulated" (perhaps a better word is compensated) and no defects appear. Not only in the ovum does this occur, but regulation or compensation extends much further along in the development of regulatory organisms than of mosaic, even far along. Among other evidence, probably the best known example for the classification of the human fertilized ovum as regulatory is afforded by the Dionne quintuplets. Congenital defects are relatively rare in the human species, perhaps for this reason, and many defects are hereditary, an entirely different mechanism.

I choose these well-known phenomena to point out that the potency of many ova is greater than the development of one individual, for as many as sixteen competent sea urchins have been obtained from one ovum by the separation of the blastomeres as they appear. A problem in biology is therefore to determine the potencies of cells at all stages of development and in all tissues. This corresponds to the pathologist's conception of the

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From the Lankenau Hospital Research Institute and the Institute for Cancer Research.

origin of cells from mother cells, usually called "blasts."

How many types of different cells can arise from a given cell which has retained some of its undifferentiated state? How far can a cell and/or its descendants differentiate? What cells have used up all of their potencies, so that no further differentiation is possible? What hinders cells which still retain potencies from expressing them? I need not point out that in these questions lie some of the fundamentals of evolution—further possibilities of development, of ourselves as well as other organisms, for better or for worse.

The ability of cells to differentiate into different qualitative patterns is far greater than was thought possible some years ago. Prospective forelegs can be made to differentiate into hindlegs, and vice versa; prospective epithelium has been observed turning into bone, and vice versa. The conclusion is that the three germ layers can no longer be considered sacred. Furthermore, the theory of embryonal rests as an explanation of, say, a squamous cell carcinoma of the gall bladder has been cut off by William of Occam's razor, i.e., it is an unnecessary hypothesis.

Part of the differentiation problem concerns the processes known as determination, and these are of the utmost importance in the theory and practice of tumors. The potencies of cells become more and more limited as they are expressed. The point at which a given potency in a cell is singled out as the one to be expressed is called the point of determination. Unfortunately, the exact time in the life of a cell at which this takes place cannot be determined by any known method except the one of allowing the cell to proceed onward and show what it was determined it should do. This can be done either in the living organism in which it is present or by transplant into other organisms. As a specific example, a group of cells arising from the head end of a crustacean may turn into either an eye or an antenna, but at one stage of development they can no longer do either, but must do one or the other.

We hear the terms "carcinoma in situ" "pre-cancerous" and like names frequently enough in pathological literature and reports. These terms signify that determination has taken place within a cell or a group, and it has been decided that the descendants of the cell or the group will be cancerous and not normal cells. If biologists assure us that they cannot tell whether determination has

taken place within a cell or not, unless they watch it and see what it does, it is quite obvious that the above terms have no meaning in any particular case, but are merely the results of a statistical approximation to the effect that experience has shown such and such lesions in some persons become cancer. Actually, pathologists cannot know whether the determination to cancer has occurred or not, unless an actual invasive cancer is present.

I hasten to state, however, in this connection that practical considerations should lead to the removal of lesions known to have a predilection to becoming cancerous, but they should not be called cancer, for this but confuses our background knowledge and leads to false statistics. The final remark about determination—of many more which could be made—is that when a particular potency of a cell is determined it need not express that potency immediately, but it may remain latent, so to speak, for minutes, hours, days, weeks and perhaps even months, during which its appearance remains that of an undetermined undifferentiated cell. This phenomenon is of great importance in cases such as this: A woman with carcinoma of the breast has had a radical amputation; ten or fifteen years later nodules appear under the skin in the vicinity of the original growth, parts of which the surgeon did not remove. Obviously their potency was determined years before, that is, they were cancer cells, but the expression of their potency in the form of multiplication, partial differentiation into whatever kind of cancer it was, has been held in check. This, a silver lining in one of the dark clouds of malignancy, is capable of investigation and imitation. What are the factors controlling this latent period, and can we imitate them?

One of the special forms of differentiation is called "chemical differentiation." By this is meant that cells develop within themselves tiny chemical laboratories which produce specific products. Thus, thyroxin results from the chemical differentiation of thyroid cells; female sex hormones from the chemical differentiation of ovarian cells. In cases in which the products are quite specific and in which they exert easily recognized influences at a distance, the presence of tumors in which the cells have undergone chemical differentiation sometimes can be diagnosed over the telephone.

Certainly the anatomic appearance of cells lining the stomach and the appearance of many of the carcinomas arising from them are different



from those of the rectum; ergo, where there is an anatomic difference there must also be a chemical and/or physical difference—a point for investigation, especially for diagnostic purposes.

All biologists, including ourselves, are interested in the parts played by the cytoplasm and the nucleus in differentiation. Experiments by Mrs. Harvey and others have shown that cells from which the nuclei have been removed can undergo at least microscopic differentiation. By refinement and elaboration of technique, Briggs has produced nucleusless cells from frog's eggs, and the effect of various substances on their differentiation is beginning to emerge. Especially important is the influence of the organizer, without which a developing embryo fails in morphogenesis.

You will remember the experiment in which Briggs removed parts of tadpoles' tails and, after regeneration had started, implanted bits of frog carcinoma into the fast growing tissues. In spite of the activity of the differentiating and organizing fields to which the normal cells of the regenerating tail responded, the transplanted carcinoma cells failed to respond. Even though the transplanted carcinoma cells contained both cytoplasm and nucleus, and so were not strictly comparable to the nucleusless normal cells with which Briggs later worked, nevertheless, these experiments and many others answer the question asked more than 100 years ago, of whether the trouble in the origin of cancer is outside or inside the cells. Even though the cancer cells were in the midst of highly potent developmental fields, they did not (could not?) respond. Is the defect in the nucleus or the cytoplasm, or both?

In the diagnosis of carcinoma cells, as in the more recently developed and highly useful (if properly done) smear technique, diagnostic differences are both in the nucleus and the cytoplasm. Time does not permit discussion of the various findings in malignant cells and views expressed over many years, such as increased relative size of nuclei and nucleoli, polychromatism and others, but these obviously are parts of the differentiation problem. It will be quite useful to add to what we know, facts about the relative parts played by cytoplasm and nuclei in normal differentiation and just what the disturbances are when they change in malignancy.

Just as there are degrees to the expression of differentiation in normal cells so there are degrees to the perverted differentiation of cancer cells.

The quantitative expressions of differentiation of normal cells are conditioned not only by what they attempt to do within themselves but by surrounding conditions which determine first of all their qualitative choice. These include physical forces such as compression and arrangement of the surrounding tissues, and the nutritional milieu. Thus it is with cancer cells also. The change within them is qualitative and may have been initiated by an external carcinogen or even perhaps from internal instability without external help, but the quantitative degree is surely favored or hindered by external conditions. A cancer of the breast, for instance, is composed of small, tightly packed cells; but when these invade the loose axillary tissues, they are able to exert more of their potencies, and thus give the appearance of glandular carcinoma. We might speculate further by guessing that the change to malignancy can vary qualitatively in the various descendants of the original cancerous cell or cells. I am merely trying here to rationalize the well-known fact that blocks taken from different parts of one and the same tumor and its metastases oftentimes differ widely in their detailed microscopy. It is needless to rehearse the fact that different metastases grow at different rates, also partly due to the differentiation patterns.

Finally, since the essentials of malignancy, namely, defective differentiation, failure of tissue and organ morphogenesis and invasion, appear from whatever original cause, viruses, chemical or physical agents such as x-rays or ultra-violet light, the change within the cells leads to similar anatomic and physiological behavior.

Obviously an important problem is to determine whether the actual changes, and of course they eventually must be expressed in chemical and physical terms, are the same, and what are the comparisons with normal cells. There are no obvious chemical relationships between the various carcinogens, although Haddow sees energy analogies.

We have stated that the potencies of cells, provided they have any, are greater than their normal developmental fates. Innumerable examples illustrate this point, and a recent one from the field of pathology may be rehearsed. Furth removed ovaries from their normal positions and transplanted them into the spleens of the same individual mice. All of the blood from the spleen goes first to the liver, and estrogens produced by the

ovarian transplant within the spleen are inactivated. This disturbs the balance between the ovaries and the pituitary. Pituitary gonadotropin is produced constantly and in much larger amounts, so the ovarian cells in the spleen are under continual stimulus. After a bit, granulosa cell tumors and/or luteomas appear. Ordinarily the lutein cells are highly differentiated but are transitory and disappear when their function ceases. Under the above experimental conditions they are no longer transitory, are continually stimulated, more cells are produced, and they finally become malignant, and can be transplanted. The lutein cells have been rescued from their normal fate of destruction by becoming malignant—if one cares for that method of expression. Parenthetically, in this case, cancer research has contributed to endocrinology instead of vice versa, as is usually the case.

From this example many implications flow. When added to other evidence, we state, as generalities, that any cell that can divide can become malignant. Stimulation is necessary for the persistence of differentiation within certain types of cells. Thus the cells of adenocarcinoma of the prostate need continuous stimulation to remain differentiated and produce acid phosphatase. If stimulation is removed, as by orchidectomy, or is overwhelmed, as with female sex hormones, their differentiation ceases, they undergo atrophy, and disappear.

Another generalization is that cells can do more than their normal developmental fates. An old and easy generalization is that differentiation and division are incompatible. In this are two loopholes. One is that we cannot tell from ordinary tissue sections how far cells which have divided or are dividing have previously been differentiated; and second, we cannot know from mere inspection, however fine, how far differentiation has removed potency, what determinations have taken place—in short, whether the cell has used up all of its possibilities. We therefore must fall back upon indirect and statistical evidence which indicates that when differentiation has proceeded beyond a certain point, division is no longer possible. This leads to the conclusion that all cell multiplication must come from incompletely differentiated cells. If incomplete they contain at least two and possibly more potencies. The old question of under what circumstances an individual cell can dedifferentiate has also not been answered. That tissues composed of many cells dedifferentiate there can

be no doubt, but the problem must be solved by individual cells, the potencies of which are known quantitatively, and there are no known methods of recording these data.

It is recognized that all of these thoughts expressed are quite random and disconnected. It should be possible though to gather a few together, and it seems easiest to do in the form of a definition. Many have tried their ingenuity in defining what a tumor is; some, discouraged in their attempt, have said the only adequate definition of a tumor is that contained between the front and back covers of a treatise on neoplasms. Here is another attempt; and while recognizing that a treatise is really needed for all of the facts, nevertheless, some of the above can be said in this wise.

A malignancy is a mass of cells which arise from and continue to proliferate within an organism, as a result of and in direct proportion to their degree of internal qualitative differences from other cells of the organism, with respect to the potencies of differentiation and organization particularly.

No mere mention of the problems in experimental embryology—and this is all that this paper has done—can be complete without at least mentioning a few problems in a sister subject, genetics. The experimental embryologist tries to discover how the fertilized egg develops. The problem of the geneticist is to describe the constitution of the fertilized egg in terms of units of heredity. The breeding experiments tell about the transmission of these units of heredity; how they act and what they are, are the newer problems. Naturally, there is much overlapping with embryology, cell physiology and biochemistry. In the latter, they deal largely with nucleoproteins, and progress is beginning at least in an understanding of these substances, as complicated as any chemical compounds known.

The old question of which is more important, heredity or environment, is no longer asked in that form, for as such it has no meaning. The proper method of asking so that an objective answer can be found is, what influence does environment have on any given characteristic, and what modification does the one impose upon the other in producing the change under question? Ramifications may be extraordinarily complicated and diffuse, as the example of the frizzled fowl will show. This chicken, called frizzled because its feathers stick out at various angles, is produced by a particular gene area in a particular chromo-



some. The animal, in addition to its frizzling, has only about half as many feathers; as a consequence it loses heat more rapidly. To compensate it eats more! its gizzard, stomach, liver and other digestive apparatus are larger than in a corresponding normal fowl, weight for weight; to maintain its heat, its blood flows faster, there are more capillaries, its heart becomes hypertrophied; it needs more oxidation, its thyroid is enlarged, and it has pop eyes. Thus all the symptoms of exophthalmic goiter are caused, indirectly through a particular genetic constitution in a particular chromosome.

The frizzled fowl may serve as an example to introduce another point not ordinarily considered except by professional geneticists. All the abnormalities in the animal come from a change in the chromosome manifesting itself in the different tissues, but are all the different tissues the same genetically? What happens when cells change their genetic composition and mutate? These are problems not answered, but which come to the fore in discussions of inherited susceptibility to cancer and of the nature of the malignant processes.

That there is an inherited predisposition to the development of cancer, but more in particular for particular places, is attested by the cases of cancer of the breast occurring in identical twin sisters in the same area of the same breast within a few months of each other. Madge Macklin has many interesting examples of cancer in families—in fact, so many that random distribution is a million to one shot. Hereditary immunities in blood group, thalassemia, xeroderma pigmentosum, Recklinghausen's disease, color blindness follow standard hereditary patterns. The peculiar difficulties attending the study of heredity as the basis of various human characteristics are well known but not always applied. Chromosomes and genes do not disappear, except by death without offspring, any more than the chemical elements in chemical reactions disappear. They are shuffled around but remain. Very few people know what killed their grandfathers and grandmothers, let alone ancestors before them. Nevertheless, progress is being made, and departments of human genetics are increasing in number, and data are increasing in amount. Pathology has a task in careful recording, so that help may be given from its peculiar material to professional geneticists.

## New Drugs for Allergic Diseases

By George L. Waldbott, M.D., and  
J. J. Gadbaw, M.D.

Detroit, Michigan

IN REVIEWING the vast literature on antihistaminic drugs some important facts stand out: The drugs specifically counteract most of the physiologic effects of histamine. They do not chemically neutralize it nor do they prevent its production in the system; they appear to compete with histamine in its affinity for the cells.

Experimentally, they diminish capillary permeability resulting from histamine; thus they counteract the histamine wheal. They control bronchospasm induced by inhalation of histamine. They prevent shock and death from lethal doses of histamine as well as anaphylactic shock. They prevent contraction of intestinal and uterine strips of guinea pigs, induced by histamine, when the drug is added to the fluid in which the strip is suspended and when it is administered to the intact animal before the experiment. Some of the drugs raise blood pressure which has been lowered by histamine. They do not affect the histamine secretion of the stomach.

Clinically, the antihistaminic drugs inhibit secretion of the lacrimal and salivary glands and of the mucous glands of the bronchial tree due to histamine. They thus counteract excessive mucous secretion, which is a cardinal feature in allergic rhinitis and in asthmatic attacks. They are effective in counteracting asthmatic bronchospasm when administered as an aerosol, by injection, and orally. Because of their inhibitory effect on the allergic wheal, they are useful in urticaria and angioneurotic edema. They produce local anesthesia when injected. When applied topically, they are of value in the treatment of allergic conjunctivitis and in pruritus of eczema and dermatitis.

We should like to present here a clinical evaluation of the following drugs: antistine, neo-antergan, decapryn, "antihistaminique RP-3277," trimeton. For comparative purposes, we shall include the data available from previous observations on

From the Allergy Clinics of Grace and Harper Hospitals, Detroit. Dr. Gadbaw is now located at 23603 Farmington Road, Farmington, Michigan.

TABLE I. RESULTS IN BRONCHIAL ASTHMA

Drug	Dose	Relief		
		None	Slight	Much
Amphaphrene Aerosol	½ %	10 (71 %)	3 (22 %)	1 (7 %)
Amphaphrene Sublingual	10 mg.	7 (20 %)	14 (40 %)	14 (40 %)
Isuprel Aerosol	1:200	2 (20 %)	—	8 (80 %)
Isuprel Sublingual	10 mg.	5 (38 %)	6 (46 %)	2 (16 %)
Antistine	50 mg.	43 (81 %)	7 (13 %)	3 (6 %)
Benadryl	50 mg.	40 (54 %)	14 (19 %)	24 (27 %)
Decapryn	25 mg.	3 (50 %)	2 (37 %)	1 (13 %)
Neo-antergan	50 mg.	45 (52 %)	12 (14 %)	30 (34 %)
Neohetramine	50 mg.	41 (58 %)	17 (24 %)	13 (18 %)
Pyribenzamine	50 mg.	35 (32 %)	25 (23 %)	50 (45 %)
RP-3277	25 mg.	9 (45 %)	6 (30 %)	5 (25 %)
Trimeton	25 mg.	9 (48 %)	3 (16 %)	7 (36 %)
Hydryllin	*	20 (11 %)	46 (26 %)	92 (63 %)

\* 100 mg. aminophylline and 25 mg. diphenhydramine (Council-adopted name for B-dimethylaminoethyl benzohydryl ether).

benadryl, pyribenzamine and neohetramine.<sup>2,3</sup> Chemically antistine, neo-antergan, neohetramine and trimeton are similar in structure to pyribenzamine. Antihistaminique RP-3277\* is a thiodiphenylamine derivative (reported by Halpern<sup>1</sup> as the most efficacious one in this group). We also wish to report on two additional compounds which are potent bronchodilators, namely isuprel\* and amphaphrene. The latter is the sulfate salt of the isopropyl analogue of epinephrine. They have no antihistaminic effect. They are reported to be useful in asthma. Another preparation included here is hydryllin, a combination of aminophylline (0.1 gm.) and benadryl (0.025 gm.).†

### Method

Our cases are divided into: (1) hay fever and allergic rhinitis, (2) urticaria and angioneurotic edema, (3) bronchial asthma.\*\* We refrained from listing seasonal and nonseasonal cases individually because such a differentiation has no bearing on the results. The presence or absence of infection was most important in this respect. We, therefore, endeavored to eliminate all cases with detectable infectious changes in the nose, sinuses or lungs.

The medications were administered only when

\*Released now as Phenergan (Merck).

†The formula of isuprel is 1-(3', 4'-Dihydroxyphenyl)-2-isopropylamino ethanol.

‡We are indebted to the following companies for the supply of the drugs: Ciba Pharmaceutical Co., Summit, N. J. (antistine and pyribenzamine); Merck & Co., Rahway, N. J. (neo-antergan); Schering Corp., Bloomfield, N. J. (trimeton); Wm. S. Merrell Co., Cincinnati, Ohio (decapryn); Nepera Chemical Co., Yonkers, N. Y. (neohetramine); Parke Davis Co., Detroit, Michigan (benadryl); Winthrop Stearns Corp., New York, N. Y. (isuprel); Amphac Pacific Laboratories, Everett, Wash. (amphaphrene); Dr. Bernard Halpern, Paris, France (antihistaminique RP-3277); G. D. Searle Co., Chicago, Ill. (hydryllin).

\*\*The classification of extrinsic and intrinsic cases is not adopted in our tables because such a distinction is highly conjectural.

TABLE II. RESULTS IN HAY FEVER AND ALLERGIC RHINITIS

Drug	Dose mg.	Relief		
		None	Slight	Much
Antistine	50	19 (24 %)	22 (28 %)	31 (48 %)
Benadryl	50	14 (26 %)	14 (26 %)	26 (48 %)
Decapryn	25	2 (18 %)	2 (18 %)	7 (64 %)
Neo-antergan	50	50 (42 %)	36 (30 %)	34 (28 %)
Neohetramine	50	50 (30 %)	44 (32 %)	59 (38 %)
Pyribenzamine	50	16 (13 %)	18 (15 %)	86 (72 %)
RP-3277	25	4 (14 %)	7 (24 %)	18 (62 %)
Trimeton	25	11 (11 %)	26 (27 %)	61 (62 %)

TABLE III. RESULTS IN URTICARIA AND ANGIONEUROTIC EDEMA

Drug	Dose mg.	Relief		
		None	Slight	Much
Antistine	50	4 (16 %)	3 (11 %)	20 (73 %)
Benadryl	50	4 (20 %)	—	16 (80 %)
Neo-antergan	50	11 (29 %)	6 (18 %)	20 (53 %)
Neohetramine	50	3 (14 %)	6 (28 %)	12 (58 %)
Pyribenzamine	50	5 (11 %)	5 (11 %)	34 (78 %)
RP-3277	25	1 (6 %)	3 (19 %)	11 (75 %)
Trimeton	25	1 (10 %)	6 (40 %)	7 (50 %)

symptoms were in evidence. In most instances, only three to five doses of each were dispensed. Some of the patients were observed personally by us for six to eight hours after the drug was given. Those taking the drugs as ambulatory patients usually reported to us on the following day.

### Results

Table I shows the results obtained with these drugs in bronchial asthma; Table II, in hay fever and allergic rhinitis; Table III, in urticaria and angioneurotic edema.

It may be noted that the antihistaminic drugs closely resembled each other in degree and duration of relief. Their beneficial effect persisted from four to six hours, varying according to the severity of the individual's condition rather than to the drug employed. An exception was noted with RP-3277, the action of which appeared to be decidedly more protracted. In asthma, most relief was obtained from hydryllin, which represents a combination of the bronchodilator aminophylline with benadryl, an antihistaminic noted particularly for its soporific action. Isuprel and amphaphrene follow next in order, if administered by aerosol inhalation. When given sublingually, the relief from bronchospasm was distinctly noticeable within a few minutes. Unfortunately, however, their clinical usefulness was greatly offset by very conspicuous side effects such as palpita-



TABLE IV. SIDE EFFECTS

Drug	Total Cases	Side Effects
Amphaphrene Aerosol	14	3 (21%)
Amphaphrene Sublingual	35	9 (25%)
Antistine	159	33 (21%)
Benadryl	152	85 (56%)
Decapryn	17	7 (42%)
Hydryllin	178	62 (35%)
Isuprel Aerosol	21	8 (38%)
Isuprel Sublingual	13	8 (61%)
Neo-antergan	244	61 (31%)
Neohetramine	245	38 (15%)
Pyribenzamine	274	104 (38%)
RP-3277	64	26 (41%)
Trimeton	131	55 (42%)

tion, tremor, marked nervousness and apprehension. In allergic nasal disease and in urticaria the results of the above antihistaminic drugs compare with those of benadryl and pyribenzamine.

Our experience with eczema, dermatitis, migraine and gastrointestinal diseases is not recorded here because of the relatively small number of cases. In eczema and contact dermatitis they were of use in the relief of pruritus, especially at bedtime. The benefits obtained from topical applications in the form of ointments are doubtful. Application of the ointment on moist lesions aggravated the condition. In true allergic migraine the drugs afforded a great deal of relief.

All the drugs studied produced side effects (Table IV) similar to those already reported. Drowsiness and dizziness were noted most frequently, particularly with RP-3277. Its therapeutic effect, however, outlasted the soporific one by several hours. It can, therefore, be employed to advantage at bedtime. Diarrhea was most common after the use of antistine. Other side effects noted were nausea, muscular twitching, restlessness, dry throat, paresthesia, headache. With several drugs a temporary aggravation of the allergic symptoms (asthma and allergic nasal symptoms) was noted.

In two patients with urticaria who had been taking antihistaminic drugs routinely for some time, the hives cleared up as soon as the drug was discontinued. Sometimes a patient would exhibit side effects from a certain drug on one day, none on another. In some individuals, unpleasant manifestations were noted only from certain drugs while the others were tolerated. Other patients experienced ill effects from every drug which was tried. Rather severe attacks of asthma were encountered following sublingual administration of isuprel, which made us restrict its use to inhalation. Serial blood counts and urine examinations

were done on patients who took neohetramine, neo-antergan and trimeton routinely every four hours for more than two months. No unusual changes were detected.

### Discussion

In moderately severe cases of urticaria and angioneurotic edema, the antihistaminic drugs constitute the best remedy available. They are preferable to ephedrine and ephedrine-like products because side effects from ephedrine are more unpleasant. If immediate action is desirable they can be administered intravenously. Here, the soporific effect should be taken into account and the patient should be made to rest for several hours. In very acute and severe urticaria, epinephrine still remains our remedy of choice.

In allergic nasal disease, they constitute a desirable palliative remedy which frequently prevents the development of secondary infection resulting from prolonged mucous secretion. However, the patients should be cautioned of their side effect, and, if possible, avoid them during the day. We found them beneficial used topically as a nasal spray.

In asthma they cannot be considered a substitute for epinephrine and aminophylline. They may be used in conjunction with these medications. On several occasions, we have seen asthmatic attacks subside after intravenous administration of pyribenzamine and benadryl when epinephrine and aminophylline were less effective. Asthmatic attacks of moderate severity respond well to administration of hydryllin.

For the purpose of counteracting the unpleasant effects of the antihistaminics, various medications have been given simultaneously, such as benzedrine, ferrous chloride (20-30 grains daily) and caffein sodium benzoate. Our attempts at evaluating this question have been inconclusive.

Through uncritical newspaper publicity, the public has been misled to consider these drugs as "new cures for allergy." Physicians should be warned against prescribing them indiscriminately and neglecting other more effective measures for control of the disease. Even in urticaria, where they are at their best, they are no substitute for thorough search for causative agents. "Cures" with these drugs have only been reported in such self-limited conditions as serum sickness or acute urticaria.

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# Familial Repetition of Myelomeningocele

By Irvin A. Wilner, M.D.

Detroit, Michigan

WE ARE REPORTING the occurrence of an infant with a myelomeningocele born to a mother who had the same defect at birth. While reports of this malformation occurring in siblings are found in the literature, we have noted none revealing this close repetition.

## Case Report

B. M. was born May 9, 1926, the first child of her parents. At birth, a myelomeningocele about the size of a ten-cent piece, involving the lumbosacral area, was present. She developed a feeding problem and was brought to the Children's Hospital in Detroit from her birthplace in Indiana, October 14, 1926. She was hospitalized until October 25, 1926, no paralysis or muscle weakness being noted. Repair at that time was not advised.

Her feeding problem was controlled, and according to her paternal grandmother, who was our informant, her growth was perfectly normal thereafter. She walked at eleven months, appeared normally bright, and began to speak at about one year.

Her mother subsequently had a second child, who had no congenital malformation. Upon the death of the father, the mother remarried and had three children, none of whom were malformed.

The patient's paternal grandmother admits no history of developmental defects in the family of any variety. None of the patient's siblings have as yet married.

On April 10, 1934, when the patient was eight years old, she was readmitted to the Children's Hospital, and the defect of the back was repaired. She was discharged on May 9, 1934, with the wound healed and in good condition.

At the time of our first examination of the patient in September, 1946, it was noted that she was six weeks pregnant. Physical examination revealed a well-healed scar, six inches long in the area of L-4 to S-1. The patient was otherwise normal. There was no history of congenital malformation in her husband, his siblings, or more distant relatives. She was delivered of a perfectly normal male infant on April 29, 1947.

She was seen again in February, 1948, at which time it was found she was twelve weeks pregnant. She was delivered of a female infant by breech extraction on July 13, 1948. The baby had a myelomeningocele, 2 inches in diameter, involving the lumbar and sacral segments. The infant was in poor condition at birth. Neurosurgical consultants noted paralysis of the lower extremities and questionable early hydrocephalus, and advised against operation. The infant died on the third

day of its life, at Mt. Carmel Mercy Hospital, Detroit, Michigan.

## Comment

In obstetrical practice, the question of the repetition of developmental malformations is not infrequently raised by patients in whose families such defects are known to have occurred. The apprehension with which these parents view the prospect of subsequent offspring necessitates an evaluation of the frequency with which certain defects occur.

Despite the difficulties inherent in any study of inherited characteristics because of the complexity of the human genetic background, there are many malformations which appear to be inherited.<sup>6</sup> The regularity with which certain defects occur make them appear to be Mendelian dominant characters. Such notably are the long bone defects of achondroplasia and agenesis of the extremities. Others appear to be Mendelian recessives, being carried in the germ plasma until mating occurs with an individual carrying the same latent defect. Certain malformations are unexplainable on the basis of Mendelian characters and may be the result of mutations, while others result from disturbances of the intra-uterine environment, as in the intra-uterine amputations rarely seen. Crew<sup>2</sup> lists the derangements which have been recorded as being inherited.

In evaluating the probabilities of recurrence in the offspring of families with one defective infant, Murphy<sup>5</sup> noted that while one malformed child was born per 213 births in the general run of the population in Philadelphia during the period of his study, one infant in eight subsequent births was malformed in families already possessing an abnormal infant. He further observed that the defect found in the first malformed child reappeared in a subsequent sibling in 46 per cent of instances. From his study he concluded that malformations have a strong tendency to duplicate among siblings, and among more distant relatives.<sup>5</sup> He found that defects involving the nervous system constituted 60.5 per cent of the total reported, hydrocephalus being the most common diagnosis.

Spina bifida cystica appears to occur in siblings with great infrequency. Shulman,<sup>9</sup> in his report of its occurrence in two successive children of the same family, cites Butler-Smythe,<sup>1</sup> Wright,<sup>10</sup> and Pendelton.<sup>7</sup> Ingraham and Swan<sup>4</sup> found that 6 per cent of their 277 cases of spina bifida admitted

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# Antipertussis Rabbit Serum in 95 Cases and 15 Contacts

## Preliminary Report

By Anthony R. Ceresko, M.D., and  
Herbert A. Raskin, M.S.P.H.  
Detroit, Michigan

IN DETROIT, Michigan, in 1947 a clinical study was undertaken to evaluate the potential therapeutic value of antipertussis rabbit serum in cases of whooping cough and contacts to these cases. The following report is a review of ninety-five cases and fifteen contacts treated with this serum.\*

The clinical impression of the physician in the field was made by the end of the first week following the initial dose. Without exception, the nurse's report of clinical progress and recovery at the end of twenty-eight days following the onset of illness agreed with the medical report. The results were based entirely on clinical impression, since no control cases were followed concurrently. Cases were evaluated in terms of lightening of the severity of spasm, decreased frequency of cough, decrease in amount of vomiting and in improvement in sleeping at night.

Tables I and II present these results.

Of the ninety-five cases treated (Table II), seventy-three cases (76.8 per cent) were classified as "success" and twenty-two cases (23.2 per cent) were determined to be "failures."† Among those

TABLE I. AGE DISTRIBUTION OF STUDY GROUP

Study Group	Total	Under Six Months	Six Months to One Year	One Year	Two Years	Three Years	Four Years	Five Years
Cases	95	16	10	19	19	16	8	7
Contacts	15	12	3	0	0	0	0	0

TABLE II. EVALUATION OF CLINICAL RECOVERY OF 95 CASES OF WHOOPING COUGH FOLLOWING ADMINISTRATION OF ANTIPERTUSSIS RABBIT SERUM

Case*	Total Cases	Success			Failure			
		Total	50% or More Recovery	Definite Improvement: Complicated	Total	No Improvement: Complicated	No Improvement: Short Duration	Definite Failure
Total Treated	95	73	65	8	22	3	8	11
Treated Within First Week	27	20	18	2	7	1	2	4
Treated After First Week	68	53	47	6	15	2	6	7

\*Treatment within first week of development of whooping or vomiting.

The diagnosis of these cases of whooping cough was based on clinical history and findings, including the white blood cell count and the differential count. The serum was given within the first week of the development of whooping or vomiting, although this does not necessarily mean within the first seven days of onset. A therapeutic dose of 4 c.c. was injected intramuscularly in cases of whooping cough, followed in two days by another dose of 4 c.c., the prophylactic dose in the fifteen contacts was 2 c.c. intramuscularly by single injection. Sensitivity tests were conducted on all members of the study group, and all were negative. Among the 110 individuals treated there were no untoward reactions.

From the Detroit Department of Health.

\*The antipertussis rabbit serum used in this study was provided by Wyeth, Incorporated.

cases classed as failures, three cases showed no improvement but were complicated by secondary infection, and eight cases, although showing no clinical improvement, were of comparatively short duration. Eight of the cases which did show definite improvement were followed, however, by complication. Of these eleven cases in which there was definite complication, eight were caused by secondary infection, two children had convulsions and one developed nasal hemorrhage. Clinical improvement in cough was noted in sixty-two cases, in vomiting in thirty-seven cases, and fifty-six individuals were reported to have slept better.

It is interesting to observe (Table II) that there

†Testing this difference against the hypothesis that if the serum were of no benefit, the expected ratio of successes to failures would have been 1:1, shows this observed difference to be statistically significant.

were failures in seven cases (25.9 per cent) of those children who were given the serum before the disease had progressed seven days after whooping or vomiting, and in fifteen cases (22.0 per cent) of those in whom the disease had been established for a longer period. Statistical tests of reliability indicate that this difference is not significant and may be a chance finding. This would suggest that early institution of treatment plays little part in the outcome of the disease.

Of further note is that of the ninety-five children treated, there were three who had previously been immunized within a year and a half of the onset of the present illness. Two of these cases were considered failures.

It is particularly interesting to observe that there were no deaths in the ninety-five cases and fifteen contacts under treatment. Included here (Table I) are twenty-six cases and fifteen contacts under one year of age, in which group there exists a comparatively high case fatality rate.

Of fifteen contacts treated prophylactically, only six individuals (40.0 per cent) were prevented from developing pertussis. An individual four persons had a modified course, and the remaining five individuals developed a typical case of the disease. Obviously, the small number of persons treated prophylactically precludes any valid conclusions relative to such use of antipertussis rabbit serum.

### Conclusions

1. It is generally admitted that whooping cough is still a major cause of death among infants, and that the therapeutic approach to this disease leaves much to be desired.

2. Antipertussis rabbit serum has been advised by many to be one possible solution to this therapeutic problem. The present study conducted in Detroit, Michigan, in 1947 is an attempt to aid in the evaluation of the efficacy of this agent.

3. The results of this study, although there exists no specific control group, would suggest that antipertussis rabbit serum might prove an adequate agent in the management of whooping cough. It does indicate the need for further investigation under strictly controlled conditions in order to determine with finality its true therapeutic advantages.

The writers wish to express their appreciation to Dr. Joseph G. Molner, Deputy Commissioner and Medical Director, Detroit Department of Health, for his advice and guidance in conducting this study.

## FAMILIAL REPETITION OF MYELOMENINGOCELE

(Continued from Page 727)

spina bifida in the family, while Cutler<sup>3</sup> obtained a history of spina bifida or hydrocephalus in other siblings in three of his sixty-two cases. Sachs<sup>8</sup> refers to a family in which three successive children had spina bifida.

The reports cited would seem to indicate that spina bifida may be hereditary in certain families.

### Summary

1. A case of close familial repetition of myelomeningocele is reported.
2. The hereditary background of congenital malformations is discussed.

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MSMS

### CURARE PREPARATION RELIEVES SYMPTOMS OF ARTHRITIS

Curare is bringing relief to persons suffering from the painful chronic disease, rheumatoid spondylitis.

Use of the preparation, d-tubocurarine suspended in oil and wax, is reported by Bernard M. Norcross, M.D., and Harold M. Robins, M.D., of the University of Buffalo Medical School, Buffalo, N. Y., in the May 28 *Journal of the American Medical Association*.

In six cases in which the doctors administered the preparation after other treatment usually prescribed for the disease had failed to produce improvement, the patients were relieved of pain, their muscles were relaxed, deformity of the spine was corrected, and they were able to take more exercise.

Practically no toxic effects from use of the preparation were noted, the doctors say.



# Bon Secours Hospital Clinic Day

Session of May 24, 1949

## EXFOLIATIVE CYTOLOGY IN PERIODIC PHYSICAL EXAMINATION

Donald G. Ross, M.D., and Nelson M. Taylor

In 1864 a tumor of the bladder was diagnosed on the basis of urinary sediment examination, but Papanicolaou who first reported the detection of cancer cells in vaginal smears in 1928 has recently popularized the method. It has now received wide application in the hands of many investigators who have examined body fluids and available orifices with increasing degrees of accuracy. The literature includes three large series totalling more than 5,000 cases in which the interpretive errors vary from 4 per cent to 0.3 per cent.

A small series of 169 private patients studied by the authors during routine physical examinations included 182 smears. Vaginal smears accounted for the majority of the examinations, and in a group of 115 cases with 124 smears there were five positives for malignancy and three questionable reports. Obviously, all the patients who had no pelvic complaints were considerably disturbed. This is reflected by the fact that all but one of the five went elsewhere for further observation. One had a hysterectomy at another hospital where the diagnosis of carcinoma was not confirmed (serial histologic specimens were not run). Two patients had curettages elsewhere without confirmation; one received "routine" radium implantation. One sixty-one-year-old patient with a smear positive for epidermoid carcinoma was operated at Bon Secours Hospital. There were no gross lesions visible, but at curettage a small irregularity was noted in the fundus. However, when hysterectomy was done, this papilloma was found to be benign, but serial sections of the cervix disclosed carcinoma *in situ*. One eighty-year-old patient was advised by a radiologist elsewhere not to have any therapy.

The limitations of the test must be explained to the patient. Nevertheless, the simplicity of the test, its inexpensiveness without hospitalization, lack of discomfort to the patient, ease with which observations may be repeated and its increasing reliability in the hands of trained observers recommend it for routine use in periodic physical examinations.

## EXFOLIATIVE CYTOLOGY—PATHOLOGICAL ASPECTS

Joseph A. Kasper, M.D.

In the past three years smears of exfoliated epithelial cells have been employed on a progressively widening scale for the diagnosis of early cancer. Since Papanicolaou first showed that this procedure can be highly efficient as a laboratory aid in the diagnosis of carcinoma of the uterus through studies of properly prepared

smears of material obtained from the vagina and cervix, it was logical that its adaptation should extend to studies of sputum, prostatic fluid, urine and breast secretions. Swabs also have been employed for the procurement of material from suspicious lesions in the mouth and pharynx and the lower intestinal tract. In a surprisingly large proportion of cases, correct diagnoses resulted without subjecting the patients to procedures requiring hospitalization. It is unfortunate, however, that the lay press has succeeded in conveying the impression that the smear will of itself serve to establish the diagnosis of cancer. It is undeniable that as a screening procedure exfoliative cytology has its place in periodic examinations, as well as in instances where certain definite signs suggest the possibility of the development of malignancy, but it should be remembered that a negative report can give rise to a false sense of security. Moreover, the criteria upon which the pathologist's report is rendered are not always absolute indications of malignancy. Such cytologic abnormalities as hyperchromatism, abnormal mitosis, and variation in cell and nuclear size may occur under conditions of cellular regeneration without the existence or possible development of a malignant change, as in ulcers due to infection or chemical action. The smear showing abnormalities of cell structure, considered to be indicative of malignancy, is not to be taken by itself as diagnostic. It is always necessary to correlate the smear findings with more precise evidence of malignancy, preferably biopsy, curettment or bronchoscopic aspiration.

The smears must be fixed, while still wet, in equal parts of ether and 95 per cent alcohol. Thin spreads are essential. Thick deposits of material will render the study of individual cells very difficult or impossible.

## DIVIDED DOSES OF PROTAMINE INSULIN IN SEVERE DIABETES

T. H. Heenan, M.D.

The goal we are striving for is the perfect control of the diabetic patient throughout the twenty-four hours of the day. Various methods of insulin administration in common use are discussed, their advantages and disadvantages.

The rationale of the two-dose administration of protamine insulin is discussed, and the results of its use are shown.

The advantages are as follows:

1. It gives the physician three variables with which to work, i.e., diet and two separate insulin doses.
2. It avoids night insulin reactions.

3. It gives a more even and normal insulin absorption and utilization.
4. It gives a more even blood sugar level throughout the twenty-four hours.
5. It allows extremely large doses of one kind of insulin to be given.
6. It should lead to fewer complications.

### HEART BLOCK

Hugh Stalker, M.D.

The *conduction of the impulse of the heart* may be blocked or slowed in one of four systems all intimately related. The *sino-auricular node* lies at the junction of the superior vena cava with the right auricle. The *A-V node*, which lies in the right auricle at the lower part of the interauricular septum, extends to the *Bundle of His* and passes to the upper part of the interventricular septum. The *right and left bundle branches*, each going to the corresponding ventricle, pass downward beneath the endocardium of the septum and give off primary branches to the papillary muscles. The strands divide into innumerable filaments to form the so-called *Purkinje fibers*.

The *blood supply* to the S-A node and the A-V node is the right coronary artery. The right bundle branch is supplied by the left coronary artery. The left bundle branch is supplied by both coronary arteries.

We think of normal rate as 60 to 90. It is important to remember that a heart rate in the forties and even in the thirties per minute at rest can be perfectly normal, particularly in athletes and especially distance runners. Pathological degrees of *sino-auricular bradycardia*, *block and arrhythmia* are rarely seen. They are most commonly produced by excessive doses of digitalis, quinidine sulphate, vagal irritation and obstruction of blood supply.

The electrocardiogram is the best method of demonstrating slowing or blocking. Treatment: omission of toxic agent and control of underlying cause. Treatment of marked bradycardia with faintness or syncope: atropine sulphate, epinephrine, ephedrine, cardiac massage and carotid denervation.

*A-V block* is a normal phenomenon in auricular fibrillation, auricular flutter and very rapid paroxysmal auricular tachycardia. Toxic and nervous influences and destructive lesions are the etiological factors for the pathology of this condition. Among other causes are extensive coronary disease, infarction of posterior wall, acute thrombosis of right coronary artery which supplies A-V junctional tissues, syphilis, diphtheria, rheumatic infection, vegetative lesions of bacterial endocarditis, congenital origin and I-V septal defects. The electrocardiogram shows prolongation of A-V conduction beyond 0.20 seconds. Treatment: discontinuance offending drugs and treat underlying cause. In rare cases when ventricular standstill is so frequent or of such long duration that dizziness, faintness, syncope or convulsions (Morgagni-Adams-Stokes syndrome) ensue, try ephedrine, gr.  $\frac{3}{8}$  to  $\frac{3}{4}$  three to six times a day.

*I-V block and bundle branch block:* When block exists to moderate or marked degree in either of the right or left bundle branches, it becomes evident in the electrocardiogram and in no other way. It may be temporary, functional, or permanent and organic; coronary atherosclerosis, occlusion of a large coronary artery (more often right or left circumflex branch), rheumatic myocarditis (right bundle branch generally), syphilitic infection (gummatous or diffuse), acute diphtheria (bad prognosis), bacterial endocarditis, tumors, trauma and congenital (I-V septal defect). The signs are reduplication of one or both heart sounds. Treatment: direct treatment to underlying cause. If angina or heart failure occur, forget I-V block and treat the heart.

### DEVELOPMENTAL CATARACT

Cecil W. Lepard, M.D.

Developmental or congenital cataracts arise from two causes: an inherited characteristic due to faulty germ plasm, or the result of maternal influences during the first three months of pregnancy. Recent reports of congenital cataracts and other anomalies occurring in the children of mothers who had German measles during the first three months of pregnancy is an example of this latter type. The association of congenital cataracts with other anomalies of the eye and also those occurring in other systems will be illustrated. Management consists in a diagnosis as to the type of congenital cataract and the determination of the extent of impaired vision. A colored movie was shown to illustrate the surgical procedure on those cases where operation is indicated.

### ATROPHIC GASTRITIS

Richard C. Connelly, M.D.

Atrophic gastritis is the condition which exists when all elements which go to make up the stomach, the various types of glands and their supporting structures, undergo degeneration and reduction in size. The gastrosopic picture is characteristic. Digestive symptoms such as anorexia, indigestion, flatulence, sense of fullness or heaviness, constipation and diarrhea are at times apparently associated with this condition alone. Nutritional deficiency states with anemia, loss of muscle tone, loss of memory and inability to concentrate are frequently found with atrophic gastritis. Whether the nutritional deficiency states precede or follow the development of atrophy is debatable. Correction of the deficiency is not usually followed by restoration of function of the stomach. Clinical experience and recent investigative work indicates that in the presence of atrophic gastritis certain fractions of foods are not absorbed from the gastrointestinal tract.



## THE SWOLLEN LEG

Donald N. Sweeny, Jr., M.D.

The proper and effective management of any patient presenting himself with a swollen indurated leg requires a knowledge of the various factors which influence the lower extremity, an understanding of the many therapeutic measures which may be employed, and, what is more important, the realization that none of even the most minor pathological processes at work are static but are conditions whose factors will continue to operate over a period of time. Progression of lymphedema, and ultimately ulceration of the leg, is the rule. A swollen leg usually has more than one positive cause responsible for its development. Awareness of the many therapeutic measures, including embolectomy for the acute arterial or venous emergencies, sympathectomy for the more chronic difficulties or systemic medical measures, is essential. The proper management of each individual case is problematic and interesting; each offers a challenge which represents more than just dressing a leg ulcer or applying an Ace bandage.

## NASAL RECONSTRUCTION

Bruce Proctor, M.D.

The term "nasal reconstruction" applies to the surgical correction of congenital and traumatic deformities of the external and internal nose. A better functioning nose is more likely to be obtained by combining accepted surgical techniques devised for deformities of the external and internal nose. In recent years, faulty concepts of nasal reconstruction have been corrected, existing methods improved and standardized, and new instruments devised. A great deal of study and research has been done concerning the proper relationship and conformation between the nares, olfactory sulcus and choanae. Many details have been worked out concerning peak positive and negative pressures, misdirected currents and regulating valves. The clinical application of these new physiological concepts has opened a new era in rhinological surgery.

## RENAL NEOPLASM

Ira G. Downer, M.D.

Neoplasms of the kidney present a clinical problem of the greatest importance, in the matter of their deadly potentialities. They require early recognition and prompt therapeutic activity if lives are to be saved. Hematuria is the earliest symptom and may be present once and not recur for months. Hence, all hematurias should be explained at once by cystoscopy and retrograde pyelography. Exfoliative cytology may help in diagnosis. Nephrectomy is the treatment. Radiation therapy is of little value.

## ABERRANT MAMMARY TISSUE

Harold B. Fenech, M.D.

The classification of congenital anomalies of the breast is discussed, and the literature is reviewed concerning several accounts of malignancy found in aberrant breast tissue.

A review of the records of Harper Hospital over a period of thirty years, which accounts for about 600,000 admissions, reveals only five cases of aberrant breast tissue; in none was a malignancy found.

This report is of two sisters, aged thirty-nine and forty, respectively. One has large, bilateral, aberrant breast tissue masses. This patient had ten children, and lactation occurred with each pregnancy. In this case, also, a cystic tumor was found in the left breast, which caused her to seek advice regarding care. Bilateral excision of the masses of breast tissue was performed.

The sister, a forty-year-old individual, has also had ten children and has bilateral masses of aberrant breast tissue; one side is quite large. Lactation has taken place in neither side. She submitted herself for examination but refuses to have the masses removed.

In reporting these cases, we are also pointing out that at Harper Hospital there has been no case of malignancy occurring in aberrant breast tissue during the thirty years of this review. Our experience would not uphold the findings of others that malignancy develops not infrequently in aberrant mammary tissue.

## CANCER OF THE BREAST

Galen B. Ohmart, M.D.

Cancer of the breast is purely a local disease in the beginning. If left untreated it will disseminate throughout the body and will eventually bring death to the patient. If the lesion is diagnosed when it is a local disease, the patient can be completely cured by excision of the lesion.

Spread of the disease may be by extension through the lymphatics or by the blood stream. When this happens, complete cure is much less likely. Hence, early diagnosis is a very important thing. Every tumor of the breast should be removed by an excision biopsy, with a frozen section study and a radical removal done immediately if malignancy is found. This should be followed by deep x-ray therapy.

Although results for complete cure are often disappointing if the disease has spread, some good results are obtained which give us hope, as the following case illustrates.

Mrs. S. P. aged thirty-one, had a tumor removed from her breast by an excision biopsy. A frozen section showed malignancy. The breast was removed by radical excision, and the glands in the axilla were grossly involved. This was followed by x-ray treatments. Fourteen months after her operation she delivered a full-term baby girl. Today, five and one-half years after her operation, she is alive and well with no evidence of a recurrence.

## RECTOURETHRAL FISTULA

Jacob F. Wenzel, M.D.

In 1913 in the *Transactions of the American Association of Genito-urinary Surgeons*, Young and Stone described a modified pull-through procedure to divert the fecal stream beyond the area of surgical repair in the correction of rectourethral fistula. Antecedent suprapubic cystostomy was used to divert the urinary stream from the operative site.

Diversion of the fecal stream and diversion of the urinary stream remain basically fundamental in the repair of rectourethral fistula.

## ANEURYSMS OF THE ABDOMINAL AORTA

E. Frederick Lang, M.D., and W. George Belanger, M.D.

The diagnosis in this unusual disease is frequently made late. The usual etiological bases are arteriosclerosis and syphilis, although possible causes are trauma, direct invasion in bacteremia, and extension of contiguous destructive processes. Unruptured leutic aneurysm produces pain, while arteriosclerotic aneurysm is usually silent until late. Either type may be evident as a mass. The most serious complication is rupture, after which the symptoms depend upon the site, rate, and extent of the bleeding.

Radiological methods aid in diagnosis, either in demonstration of an unsuspected lesion or in confirmation of the clinician's suspicions. Pressure effects on the urinary tract, gastrointestinal tract or skeleton sometimes lead to the diagnosis. If the patient survives rupture, the clinical picture may be confusing while the roentgen changes are characteristic.

In the diagnosis of this disease in all its stages, the closest co-operation between the clinician and the radiologist is imperative.

## SUBTOTAL GASTRECTOMY FOR PEPTIC ULCER

William E. Abbott, M.D.

The results of twenty cases undergoing subtotal gastrectomy for peptic ulcer are presented with emphasis on the pre-operative and postoperative care and the reasons why this operation is preferred to vagotomy.

Since a fairly high incidence of postoperative complaints (diarrhea and distention) was encountered in the author's limited experience with vagotomized patients, it seemed of interest to compare the immediate risk and the early results of this procedure with that of subtotal gastrectomy.

It has been fairly well established that when a vagotomy is done the mortality rate is extremely low and that the period of hospitalization is relatively short. However, because a moderately high incidence of postoperative complaints (incomplete vagus section, distention and diarrhea) has followed this procedure, it is felt that the present-day figures would show that the results and risk and the period of hospitalization following a subtotal gastrectomy are such that the latter operation is to be preferred.

In this series of twenty consecutive cases there were no deaths. In one case the results were poor, and in nineteen, good to excellent. The patients' stays in the hospital following subtotal gastrectomy ranged between four to nine days, with the exception of the one case in which the poor results were obtained. This one will be discussed.

While this series is small, it is believed that if careful attention is paid to the following items, the mortality rate and the speed of recovery of patients undergoing a subtotal gastrectomy should rival that seen in vagotomized patients and that the results would be preferable:

1. The preoperative dietary management includes electrolytes, vitamins, and protein, especially in obstructed and bleeding patients.
2. The restriction of sodium containing solutions.
3. An adequate gastric resection with emphasis being placed on care rather than speed.
4. The use of adequate quantities of blood.
5. The use of a nonabsorbable suture for the fascia.
6. Careful and repeated chest examinations with early ambulation and coughing.
7. *Nothing* by mouth postoperatively until peristaltic sounds are audible. Gastric suction and prostigmine as indicated.

## TRICHOMONAS VAGINALIS VAGINITIS

Robert G. Swanson, M.D.

Leukorrhea is the most common and often distressing symptom among gynecological patients. Leukorrhea of vaginal origin is most often due to a vaginitis caused by the flagellate, trichomonas vaginalis. The innumerable variations in treatment are testimony of the lack of accurate knowledge concerning this distressing disease.

The disease occurs in any age group from puberty to the postmenopause and is most often associated with definite symptoms and characteristic clinical findings.

The diagnosis is often confused with gonorrhea, and careful differentiation must be made by use of the stained smear and the fresh wet smear.

Treatment is varied and with equally good results. In general, the principles as based on keeping the vaginal mucosa dry, maintaining the vaginal acidity at a normal level of 4.5 to 5.0, giving home therapy during the intervening menstrual periods and hygienic instruction on care of the perineum.

Variations in treatment must be considered when dealing with coexistent infections, pregnancy and the menopause.

Criteria for cure must be established, and all recurrences must be reinvestigated for foci in the urethra or bladder. In this category one must consider the husband as a possible carrier.

## MEDICAL ASPECTS OF JAUNDICE

Herbert C. Allison, M.D.

Jaundice is essentially a symptom of some underlying disease. If one understands the mechanism of jaundice along with symptoms produced, it is usually possible to



make a correct diagnosis of the underlying condition.

The hyperbilirubinemia that causes the yellow discoloration of skin and mucous membranes may be due to an over production of bilirubin.

1. Hemolytic jaundice is due to:
  - (1) Hemolytic anemias.
  - (2) Pernicious anemia.
  - (3) Pulmonary infarct.
  - (4) Poisoning.
2. Due to hepatic cell damage preventing proper secretion of bilirubin, intrahepatic jaundice:
  - (1) Acute hepatitis.
  - (2) Cirrhosis.
  - (3) Pneumonia.
  - (4) Syphilis (congenital).
  - (5) Pregnancy.
  - (6) Poisoning.
  - (7) Mononucleosis.
  - (8) Abscess.
3. Due to obstruction to bile flow, obstructive jaundice:
  - (1) Cholelithiasis.
  - (2) Carcinoma (bile ducts, gall bladder, pancreas, and papilla of Vater).

The symptoms and treatment of the first two types are primarily medical, while the third is of necessity surgical.

The scope of this paper will therefore confine itself to discussion of the first two types.

## LABORATORY AIDS IN DIAGNOSIS OF SURGICAL JAUNDICE

E. John Tamblyn, M.D.

1. The problem of the practitioner: the differential diagnosis between hepatitis, including cirrhosis (medical jaundice) on the one hand, and extrahepatic biliary obstruction (surgical jaundice) secondary to stones, tumors, strictures, scars, adhesions.
2. Comments on the confusion existing regarding the value of laboratory tests in the diagnosis of jaundice and the reasons for same.
3. The laboratory tests used in the differential diagnosis of surgical jaundice. The two basic factors to be determined are (a) impairment of bile flow and (b) impairment of hepatocellular function.

### (A) Tests to determine impairment of bile flow:

- (1) Absence of urobilinogen in the feces and urine.
- (2) Increase of serum alkaline phosphatase level.
- (3) Hypercholesteremia.

### (B) Tests indicating liver cell dysfunction:

- (1) Quantitative changes in the total serum proteins, and the albumin and globulin fractions.
- (2) Qualitative changes in the plasma proteins.

(a) Cephalin—cholesterol flocculation test.

(b) Thymol turbidity test.

(3) Cholesterol esters—(quantitative changes in).

(4) Prothrombin time—changes in.

(5) Changes in hippuric acid excretion.

(6) Urobilinogenuria.

(7) Renal pathology.

(C) Tests indicating both bile flow impairment and liver cell function:

(1) Serum bilirubinemia—direct and indirect bilirubin.

(2) Bilirubinuria.

(3) Bromsulphalein retention.

(D) Liver biopsy.



## DEPARTMENT OF GENERAL PRACTICE?

"Your inquiry relative to the establishment of a Department of General Practice in medical schools stems from premises that I must characterize as untenable. In my judgment, undergraduate medical education must perforce cover such a breadth of basic and clinical subjects as to preclude specialization. Its tenets should primarily assume preparation for the practice of general medicine. At least upon the foundation of a good medical education in a modern medical school, through a sound internship and subsequent experience fortified by periodic courses and regular attendance upon scientific meetings, a true practitioner of medicine will eventually emerge. In my judgment, our objectives in undergraduate medical education should be the sound preparation of the individual to become the family counselor in medicine.

"In my judgment, a separate Department of General Practice is a backward, rather than a forward, movement. Rather would I have a well-rounded and proved family counselor appointed to the staff of the Department of Medicine. By precept and example he will do infinitely more to advance general practice than in a separate department."—WILLIAM S. MIDDLETON, M.D., Dean, University of Wisconsin Medical School.

## NEW DRUGS FOR ALLERGIC DISEASES

(Continued from Page 726)

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10 Peterboro

# Detroit Physiological Society

Session of March 17, 1949

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## The Effect of Splenectomy in the Hemolytic Anemias

Frederick A. Collier and Alexander Blain, III,  
University Hospital, Ann Arbor, Michigan.

Hereditary spherocytic anemia and certain forms of acquired hemolytic anemia are prominent among diseases treated by splenectomy. The former is transmitted as a Mendelian dominant, and the basic abnormality appears to be an inherited variation in red cell structure (Microspherocytosis). Idiopathic acquired hemolytic anemia appears to be the result of chemical changes in the serum or of immune bodies acting upon the red cells. The role of the spleen in these syndromes is poorly understood, but clinical cures often follow splenectomy.

At the University Hospital, Ann Arbor, twenty-nine patients underwent splenectomy for hereditary spherocytic anemia in the period between July, 1934, and May, 1947. There were two hospital deaths (one from a transfusion reaction during a hemolytic crisis, and one from postoperative venous mesenteric thrombosis), and one death from unrelated causes. The remaining patients are clinically cured. None have anemia or jaundice as determined in a complete follow-up study. Eight of the twenty-nine patients had associated cholelithiasis. None had leg ulcers.

The acquired form of idiopathic hemolytic anemia, in contrast, does not provide as clear an indication for splenectomy, and the end results are poorer. In fourteen patients operated upon for this disease during the same period, five died. There was one anesthetic death, and one death six months postoperative from associated cirrhosis (the anemia having been cured). Three additional patients died eleven months, twelve months, and seven months postoperatively without relief, in spite of multiple transfusions, from their acquired hemolytic anemia. All nine living patients report that they are feeling healthy and well.

A comparison of the mortality and results in the hereditary hemolytic anemia (mortality under 7 per cent) and the acquired idiopathic hemolytic

anemia (mortality 28 per cent) serves to emphasize the difference between the results to be expected from splenectomy in these two forms of hemolytic anemia.

## Spinal Cord Connections for Sensory Nerve Fibers from the Knee Joint of the Cat

Ernest D. Gardner, Wayne University College of Medicine, Detroit, Michigan.

Nerves to diarthrodial joints are distributed in a fundamental pattern. They vary in their course but, on reaching a joint, supply a rather constant region. Overlap is present so that each major region of a joint is supplied by at least two nerves. There are regional differences so that certain areas are more heavily supplied than others and contain proprioceptive type endings. Free nerve endings also occur in joint capsules, and in association with blood vessels, and come from smaller fibers of joint nerves.

Functions of joint nerves have been studied mainly in the cat and usually by electrophysiological methods. Results show that fibers giving off proprioceptive type endings enter the spinal cord and give collaterals which ascend in dorsal funiculi to the brain stem. Presumably this pathway is concerned with joint position sense. The same entering fibers also give collaterals to gray matter of several cord segments. Connections are established which result, in decapitate cats, in reflex activation of flexor muscles. In decerebrate cats, however, extensor muscles were occasionally involved as well. The movement patterns obtained in these experiments suggest that the above pathways are concerned in reflex control of locomotion.

Stimuli strong enough to affect smaller fibers, those forming free nerve endings, also result in reflex flexion and contralateral extension as well. Vascular and respiratory changes also occur, so that these are undoubtedly pain pathways.

In summary, articular nerves are concerned with the transmission of proprioceptive and painful stimuli. Anatomical evidence also indicates that



vasomotor and vasosensory fibers are present in the nerves.

### The Physiological Basis of Some Problems of Late Pregnancy

Clark Gillespie, Carnegie Institute of Washington, Baltimore, Maryland.

Complications of late pregnancy may arise from aberrations of physiological growth patterns of early pregnancy. Studies on litter-bearing animals revealed three distinct periods of uterine growth commencing with a period of preparation which consists of proliferation of the endometrium in preparation for nidation. Following nidation is a period of uterine proliferation which is characterized by hyperplasia of the myometrium, due mainly to the tension stimulus of the enlarging conceptus site. This tension reaches a critical point as growth at each site continues in a spherical shape until ischemia of the myometrium takes place. The tension is abruptly relieved at the onset of the third stage by rapid elongation or "conversion" of the uterus into a cylindrical shape. The ischemia is thereby reduced as is the stimulus for growth. Enlargement thereafter is accomplished mainly by elongation of myometrium already

developed. Moreover, the fetus matures rapidly in this cylindrical uterus, and it seems that the maturity at birth of a given species is related not to the total length of gestation but to the relative time the fetus is in the uterus of the last or converted stage.

Primate uteri appear to follow a somewhat similar pattern. In Rhesus monkeys, elongation of the uterus from a basically spherical shape occurs about the one hundredth day. At this point there appears to be cessation of growth of the myometrium and its vasculature and enlargement thereafter is due to lengthening of these tissues and so imposes a limit upon the length of gestation.

Growth in the human uterus diminishes about the twenty-fourth week. This appears to coincide with a change in the shape of the organ and with an increase in the maturation rate of the fetus. The cessation of growth of the myometrium and its vessels constitutes certain limits on gestation. Further, failure of normal growth of these elements before the twenty-fourth week may be demonstrated late in pregnancy by inability of the uterus to accommodate the products of conception and further by the onset of placental ischemia which is believed to be related to the late toxemias.

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### Session of April 14, 1949

#### Effects of Anterior Pituitary Growth Hormone Preparations on the Glutamine-Glutaminase System

Paul D. Bartlett and Oliver H. Gaebler, Edsel B. Ford Institute for Medical Research, Henry Ford Hospital, Detroit, Michigan.

Van Slyke et al (J. Biol. Chem., 150:481, 1943) have shown that transport and storage of ammonia are physiological functions of glutamine. Storage of amino nitrogen might be another function, and, in this respect, glutamine might be considered a major constituent of Schoenheimer's "metabolic pool" of nitrogen. Since in this and other laboratories, weight gain and nitrogen storage have been produced in rats and dogs with growth hormone preparations, it seemed of interest to study the *in vivo* effect of the recent Fishman, Wilhelmi, and Russell preparations on the glutamine-glutaminase system.

Kidney glutaminase assays, according to the method of Archibald (J. Biol. Chem., 154:657,

1944) were made on *ad libitum* fed twenty-six to twenty-eight day-old hypophysectomized rats, on hypophysectomized rats treated with 10 mg. of growth hormone preparation, and on normal rats. Values of 19.1, 30.6 and 35.2 units of glutaminase per ml. of 25 per cent kidney emulsion were obtained.

Studies conducted on hypophysectomized rats at approximately 1/20 of the dose level employed in the first experiments resulted in the production of a 27 per cent increase in body weight but no change in kidney glutaminase. Kidneys from the hypophysectomized controls assayed at 19.7 units per ml. of 25 per cent emulsion, and kidneys from the paired-fed hypophysectomized treated rats assayed at 19.9 units per ml. of 25 per cent emulsion.

Effects of growth hormone on plasma glutamine levels, determined by the method of Archibald, were studied on adult female dogs weighing from 15 to 18 kilograms. Elevations in plasma gluta-

(Continued on Page 738)

## Michigan Medical Service

Michigan Medical Service, the outstanding American plan of medical care, was conceived and is administered by Americans, for Americans.

It is American because it is voluntary with no element of compulsion, no interference with private initiative, no reduction of self-respect, and no subservience to the politician. It does not set up rules and regulations governing methods of selection and of treatment by doctors. There is no interference with patient-physician relations.

Over one half of its Board of Directors are doctors of medicine, citizens who know the problems and need, of supplying medical care and who have the scientific knowledge necessary to develop adequate programs of benefits.

Michigan Medical Service has developed by trial and error the actuarial data covering the costs of medical care. It knows what to expect in demands for medical services from its subscriber groups. It is so efficient in management that over 88 cents of the subscriber's dollar is returned to him in services rendered by our doctors. It has the knowledge and know-how so that all our citizens can be protected against medical costs. It developed the home-town care of veterans with service-connected disabilities, thus supplying a much needed service at a minimum cost. It has developed plans and can readily include the indigent in its program of protection against the unpredictable costs of health service.

Michigan Medical Service is true protection against those costs of catastrophic illness which might prove a financial burden to its subscribers.

There is but one criticism: not enough people are covered by this type of medical service. A rapid expansion in enrollment to blanket at least one half of our population would entirely eliminate any demands for a governmental, politically controlled, scheme of medical care.

Doctor, this is a challenge to YOU. Do your important part among your patients, your friends, your community to help increase the total subscribers in this potent answer to socialized medicine which you helped to create—Michigan Medical Service.

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



*Page*



**Anterior Pituitary Preparations***(Continued from Page 736)*

mine of 19, 30 and 33 per cent above the average control level were obtained. Nitrogen storage and weight gain were produced and excretion of urinary ammonia paralleled changes in the level of plasma glutamine. The inverse relationship of total urinary nitrogen excretion to the plasma glutamine level favored the interpretation of a functional role for glutamine in the interim storage and transport of amino nitrogen. In a final experiment, however, in which both the plasma glutamine amide nitrogen and the total 2-amino acid carboxyl nitrogen were determined, it was found that changes in glutamine amide nitrogen did not in any instance account for changes in the total free 2-amino acid carboxyl nitrogen or for the nitrogen stored.

Results of these experiments seem to indicate that the protein anabolic effects of the growth hormone are not due to direct effects on the glutamine-glutaminase system. Glutamine, however, does appear to be involved secondarily in nitrogen storage and subsequent catabolism.

**The Liver Glycogen Concentration in Fasted Alloxan Diabetic Rats**

Yoshikazu Morita and James M. Orten, Wayne University Medical School, Detroit, Michigan.

Low liver glycogen concentrations have been considered characteristic of diabetes mellitus since the days of von Mering and Minkowski. It has been found in our laboratory, however, that the glycogen concentration in the liver of the alloxan diabetic rat fasted for twenty-four or forty-eight hours is significantly higher than that of the correspondingly fasted normal control rat. One possible explanation for this finding may be the elevated blood sugar of the diabetic animals. The increased glucose concentration may shift the equilibrium of the reactions involved in the direction of glycogen synthesis. In support of this explanation is the finding of a significant, moderately high positive correlation between liver glycogen concentration and the logarithm of the fasting blood sugar value in the twenty-four-hour fasted alloxan diabetic rat. That the adrenal glands are also involved is indicated by the hypertrophy of the adrenal cortex in alloxan diabetic rats, and the disappearance of the high liver glycogen values in the twenty-four-hour fasted alloxan diabetic

rat after bilateral adrenalectomy. Another factor which may contribute to the elevated liver glycogen concentration is the polyphagia exhibited by diabetic animals. However, even on a severely restricted food intake, the liver glycogen content of the alloxan diabetic rat after a twenty-four hour fast is still higher than that in the normal fasted animal.

**The Effect of Dietary Fat and Carbohydrate on Diethylstilbestrol Induced Mammary Cancer in the Rat**

W. F. Dunning, M. R. Curtis and M. E. Maun, Wayne University College of Medicine, Detroit Institute of Cancer Research, and St. Mary's Hospital, Detroit, Michigan.

The effects of dietary fat were assayed under conditions of controlled caloric intake by placing eighty-four A x C Line 9935 female rats, with diethylstilbestrol pellets implanted in their scapular regions, on isocaloric synthetic rations of varying fat and carbohydrate content. Diets adequate in protein, minerals and vitamins, varying in fat content from 6.5 to 46.0 per cent, with sufficient dextrin to equalize the caloric content, were fed *ad libitum* and restricted to rats in individual cages. The caloric consumption varied from 40 calories daily for rats on the *ad libitum* high fat diet to 34 calories for those on the *ad libitum* low fat diet and their paired mates on the high fat diet, and was restricted to 25 calories in isocaloric portions of high fat, modified low fat, and low fat diets.

Of the sixty-seven rats which survived for at least 180 days, fifty-eight (87 per cent) developed 236 gross and 337 microscopic adenocarcinomas of the mammary gland. Restricting the caloric intake by 26 to 38 per cent of the *ad libitum* consumption did not decrease the percentage of rats which eventually developed mammary cancer, but increased the latent period from approximately 300 to 400 days.

More tumors were observed in a shorter average latent period in rats on a high fat diet than in their paired mates. Increased consumption of the high fat diet, however, lessened rather than enhanced these differences, and the only consistent effect appeared to be an accelerated growth potential in the preformed cancer cells.

Supported in part by a grant-in-aid from the United States Public Health Service.

# Editorial

## DESCENDANTS OF HIPPOCRATES

To THE MICHIGAN Descendants of Hippocrates, Greetings: May you never betray your obligations to mankind.

ONE HUNDRED years ago, Michigan formed its first medical society. We are proud of the record.

Ten years ago the state society developed Michigan Medical Service and lent its support to Michi-



R. L. Novy, M.D.

gan Hospital Service, the Blue Shield and the Blue Cross of Michigan. We are proud of the record. Will future history be proud of the way we will continue to discharge our obligations in this great movement? Ten years of action, not platitudes, should answer any doubting Thomas. The times call for your participation, not procrastination.

Ten years ago there was developing a bitter war of words and threats between those who would socialize medicine and the stand-patters. This war continues, with twelve points on one side, presidential campaign speeches on the other, while steadily down the road with its objective clearly in view march the Blue Cross and Blue

Shield, the only positive action amidst all the hubbub.

You may well be proud of Michigan leading the vanguard for the rest of the country— thirty-three million people covered in the United States by the Blue Cross and eleven million covered by the Blue Shield, the doctors' own plan, conceived and executed by the doctors for the good of mankind.

While the battle of words continues, the Blue Shield plans have increased their enrollment 43 per cent in the past year. The public trust assumed by the medical profession continues to find favor throughout the nation; results speak louder than words. Experience by trial and error can answer a panacea sold under the carbide lamps of a presidential campaign.

Let each and every one of us remember where we stand. The Blue Shield movement throughout the country is the doctors' answer to the problem of the day. Back of every Blue Shield stands the county and the state organizations of the medical profession, controlled by the profession, administered through the profession, and executed by the profession. It represents action by the medical profession in contrast to platitudes and forensic displays.

It is my hope that every doctor in the State of Michigan will put his shoulder to the wheel and save his breath for the job at hand. You owe it to society and to yourself. While Rome burns, Nero fiddles! —ROBERT L. NOVY, M.D.

## NATIONAL SOCIALISM

### Who are the Socializers?

THE COMMITTEE on Research in Medical Economics was established by Michael M. Davis, Ph.D., formerly director of Medical Services of the Rosenwald Fund, with a gift of \$165,000 received from his former employers. He is still actively directing this committee with headquarters at 1790 Broadway, New York City.

The Committee for the Nation's Health, Channing Frothingham, M.D., chairman, was organized in 1946 by Michael M. Davis as an organization "to force the administration's health bills through the 79th Congress." Davis is the dom-



inating head. On the Board of Directors are John J. Corson, formerly of the Social Security Board, and an associate of Arthur J. Altmeyer; Mrs. Albert D. Lasker, New York; Ernst P. Boas, M.D., present or past member of several Communist-front organizations; Anna M. Rosenberg, New York, also associated with Altmeyer, and a member of the Social Security staff for many years; Mrs. Gardner Cowles, wife of the owner of the Register and Tribune Company, Des Moines, Iowa. The Committee for the Nation's Health is reputed to be financed by Marshall Field, Mr. Lessing Rosenwald, Adel Rosenwald Levy (Mrs. David), Albert D. Lasker, Mr. and Mrs. Gardner Cowles, et cetera. These were prime movers in Oscar Ewing's National Health Assembly, Inc., of 1948.

The Physicians Forum, Inc., has Ernst P. Boas, M.D., as chairman, is a larger and very vocal organization, working with the rest of the crowd who for thirty years have been trying to nationalize (as they call it) medicine.

Michael M. Davis, Isadore S. Falk, Arthur J. Altmeyer, Wilbur J. Cohen, and Ernst P. Boas, M.D., are the outstanding movers. Associated with them later have been Oscar R. Ewing and J. Donald Kingsley, his assistant. Many other names could be added to the list, but these are the names and the organizations we are going to hear about in the forthcoming campaign to save all of us from National Socialism.

## THE PROGRAM

THE EIGHTY-FIRST Congress has before it S.5 and H.R.783, the old Wagner-Murray-Dingell bill reintroduced with no changes—also a bill introduced April 25, S.1679, H.R.4312, and H.R.4313.

This is sponsored by Senators Murray, Wagner, Pepper, McGrath, Chavez, Taylor, Thomas and Humphrey, and Congressmen Dingell and Biermiller. This is reported to be over 163 pages, and is the Administration Bill. Comments are on Page 684.

Two other bills are before the Congress: S.1456 was introduced March 30 by Senators Lister Hill (D. Ala.), O'Connor (D. Md.), Withers (D. Ky.), Aiken (R. Vt.), and Morse (R. Ore.). S.1581 was introduced April 14, 1949, by Senator Taft (R. Ohio), Smith (R. N. J.), and Donnell (R. Mo.). These are both grants-in-aid bills, which would

stimulate voluntary, nonprofit health insurance plans, and would help the states to work out their own health programs with Federal assistance. S.1456 we outlined last month. S.1581 we have not received at this writing, but Senator Taft has this to say:

"The bill . . . seeks to apply the best knowledge at our disposal to the vast problem of promoting the health of the American people. This problem is composed of many factors, some of which, such as income levels and habits of living, are entirely beyond the reach of specific health legislation. Others, however, can, to a great extent, be guided or stimulated by law without violating our American traditions of personnel, and the degree to which professional, medical and hospital services are actually within reach of the people generally. It is with such manageable factors as these that we seek to deal in this bill."

The House also has two bills for consideration. H.R.2892 proposes that the Government enter the field of medical assistance, and H.R.2893 would increase the present old age and survivors insurance. It would compel self-employed persons (physicians, lawyers, writers, shop keepers) to pay an additional income tax amounting to 2.25 per cent, in addition to all other taxes.

## THE MEANS

EVERY PRESSURE measure has been used to condition the people to the so-called "fact" that the health of the American people is rotten. Draft figures were wrongly quoted. Millions of government money and thousands of government employes have been used to further the cause of socializing medicine. Oscar Ewing called a National Health Assembly and misused its report in his "Report to the President," advocating the very thing his own inspired organization refused to endorse.

Some months ago we reported the suit against the Oregon State Medical Society and the Oregon Physicians Service under the Sherman Antitrust Law, charging restraint of trade. We have been informed that other medical societies are being investigated, and at the Blue Cross-Blue Shield Conference in Hollywood Beach, Florida, the report was made that the FBI men came into a Chicago Medical Society office, demanding their books for the past six years.

(Continued on Page 758)

# Who's Who in MSMS

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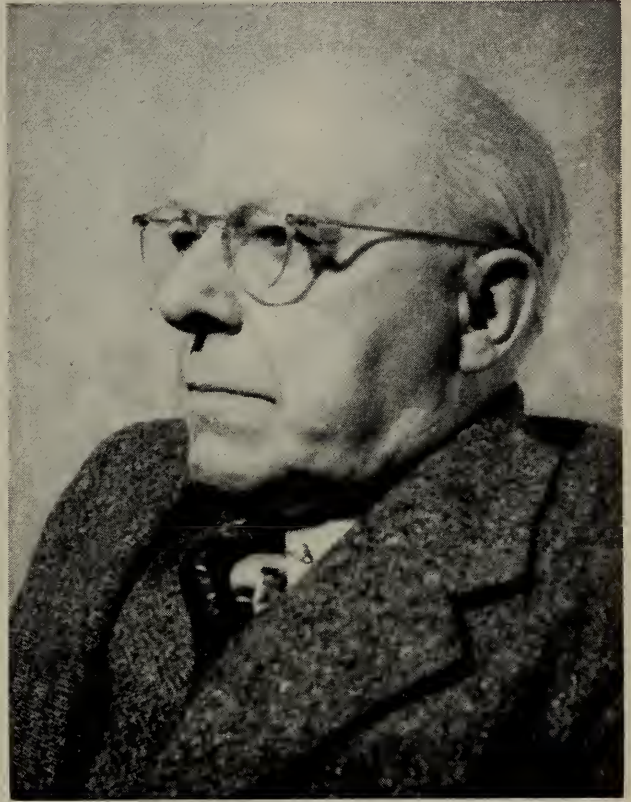
No mention of the accomplishments of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY would be complete without noting the long-time contribution of James Herbert Dempster, M.D., Detroit's beloved physician, who guided the book through the mercurial years of 1928 through 1938.

Dr. Dempster, emeritus professor of roentgenology of Wayne University College of Medicine, received his degree in medicine from this same school in 1909.

Dr. Dempster came to the editorship of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY in 1928 after many years of lay and medical editorial experience. He had been assistant editor of the London, Ontario, *Advertiser*, 1900 to 1912, and editor of the *Windsor Daily Record*, 1902 to 1905, and later, editor of the *Detroit Medical Journal* over eleven years, from 1909 to 1920. Dr. Dempster for years has been interested in medical history and has published numerous articles of high literary value on the subject of prehistoric diseases. He also has worked on medical history, especially of the Beaumont times and works.

In 1930 a *Medical History of Michigan* was published under the auspices of the Michigan State Medical Society, with C. B. Burr, M.D., as editor. In this two-volume opus Dr. Dempster prepared much of the text about William Beaumont, and much of the other text was gleaned from the *Pathfinders of Physiology* published by the Detroit Medical Journal Company in 1914, an excellent book by J. H. Dempster, who also wrote and published a text on medical writing. The chapters on medical education and on the first Michigan territorial medical society in the *Medical History of Michigan* are the work of Editor Dempster.

Dr. Dempster always has been a staunch defender of American medicine in its voluntary form—many of his editorials berating the almost constant attempts to socialize medicine, made even in the Torrid Twenties and the Prostrate Thirties. Indicative of his attitude is this quotation from a recent letter in which he said: "I think you will find on record enough that I have written edi-



J. H. DEMPSTER, M.D.

torially against socialized medicine that, should totalitarian socialism ever be the order of the day in the U.S.A., my words would entitle me to first place before the firing squad or an igloo on the icy waters of Nova Zeubla."

Some of the principal subjects discussed in THE JOURNAL columns during Dr. Dempster's decade in the editor's chair were those concerned with the Basic Science Law, the report of the National Committee on the Costs of Medical Care, and the development of the postgraduate training program for Michigan physicians.

Michigan medicine will forever be indebted for the years that Detroit's Dr. Dempster so unselfishly gave to it. His was the hand that guided THE JOURNAL through ten perilous years of the great depression. To Emeritus Member Dempster the Michigan State Medical Society expresses sincere thanks for the legacy he bequeathed to his profession.



# Michigan Medical Service

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Chicago, Illinois  
May 2, 1949

Wilfrid Haughey, M.D.

Editor

Journal of Michigan State Medical Society

610 Post Building

Battle Creek, Michigan

Dear Doctor Haughey:

The devotion of this issue of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY to the affairs of Michigan Medical Service indicates a realization of the relationship between Blue Shield and the practice of medicine. The time is past, if indeed it ever existed, when the responsibility of the physician is limited to providing medical care. He must now offer a solution for the economic problems of medical care. He alone can do this without revolutionizing the pattern of medical practice which has brought the world capital of medicine to the United States.

In this evolution of medical thought, Michigan has been in the forefront. This is why Michigan Medical Service was the first Blue Shield Plan to reach an enrollment of a million members, and why it is regarded as a keystone of the entire Blue Shield structure.

With admiration for both the Michigan State Medical Society and Michigan Medical Service, I am

Most sincerely,

PAUL R. HAWLEY, M.D.

*Chief Executive Officer, Blue Cross-  
Blue Shield Commissions*

# Michigan Medical Service

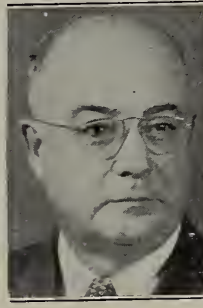
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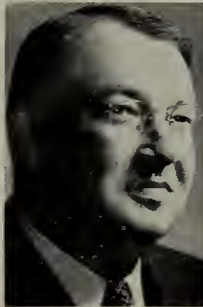
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# Michigan Medical Service

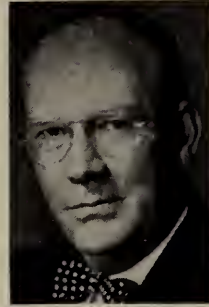
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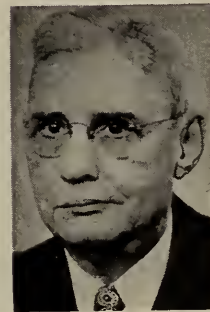
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L. V. RAGSDALE, M.D.



JOHN REID



PHILIP RILEY, M.D.



WM. ROTHSCHAEFER,  
M.D.



E. F. SLADEK, M.D.

# Michigan Medical Service

## Staff



JAY C. KETCHUM  
Exec. Vice President  
Director



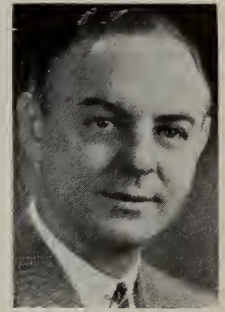
L. G. GOODRICH  
Assistant Director



FLORIEN H. PAULSON  
Administrative Secy.



C. D. MOLL, M.D.  
Medical Director



J. E. VERBIEST  
Office Manager



R. A. HENSHAW  
Assistant Treasurer



J. W. CASTELLUCCI  
Mgr. V. A. Program



H. S. HOSMER  
Chief Accountant



E. J. REILLY  
Chief Claim Examiner



R. S. HAINES  
Field Representative



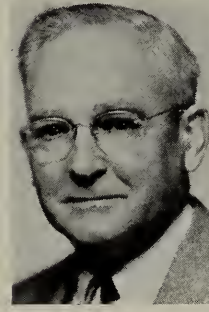
W. H. BYRNE  
Field Representative



W. W. BOYLES  
Field Representative



KENNETH TRIMM  
Field Representative



ROBERT MORSE  
Field Representative



IVY ROTHERY  
Subscriber Relations



JOSEPHINE HUHLER  
Subscriber Relations



ARTHUR CLEMENTS  
Statistician



M. S. GREELY  
Business Machines  
Manager



# History of Michigan Medical Service

MICHIGAN MEDICAL SERVICE is the outgrowth of studies begun early in the 1930's by the Michigan State Medical Society and by various county medical societies in Michigan. The studies included an examination of the British panel system by representatives sent to England for that purpose. It was necessary to secure enabling legislation in Michigan, however, before the program could be put into operation. This legislation was passed during 1939, and Michigan Medical Service began operation on March 1, 1940.

It first offered a complete medical care program, covering medical services rendered in the patient's home, the doctor's office and the hospital. The objective of the doctors of Michigan, in other words, was to provide a medical program that was complete in every respect.

In the absence of actuarial data, the rate for this complete medical care program was set at \$4.50 a month for a full family—a figure which proved to be barely half the actual cost of providing service to the average family at that time. In spite of this half-cost figure, the program attracted only negligible public interest. There developed almost immediately a considerable public pressure for protection against the costs of only major illness, and in response to this pressure Michigan Medical Service developed a program providing for surgical care in hospital cases. In twenty-seven months more than 350,000 persons were enrolled for this limited or surgical protection. During the same period of time, the maximum number enrolled under the complete medical care program was only 7,375 persons. Because of lack of public interest, the complete medical care program was discontinued in June, 1942.

It is, however, still the intention of Michigan Medical Service to broaden coverage as rapidly as there is evidence of adequate public interest. In order to determine public interest, a survey utilizing scientific sampling methods and involving personal interviews with nearly 5,000 persons throughout Michigan was undertaken during June and July of 1944. The survey showed that the people had definite interest in a program providing for medical care as well as surgical care in hospital cases, and

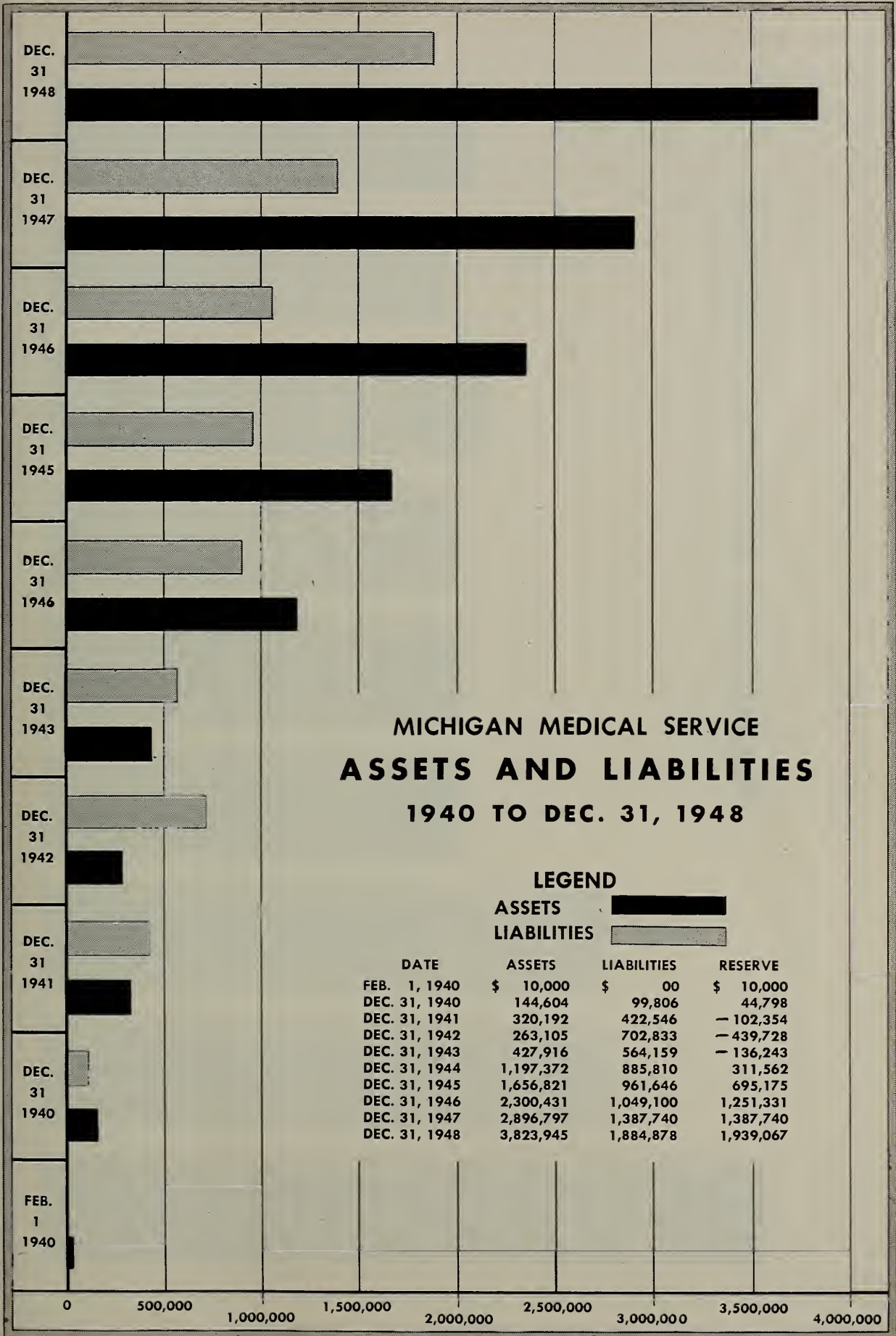
Michigan Medical Service consequently has developed added protection of this type. The survey also showed that the residents of Michigan still were not interested in a program covering doctor's services in his office and in the patient's home. On September 1, 1948, however, all certificates were liberalized providing for surgical care in doctors' offices and out-patient departments of accredited hospitals, where the fee, in accordance with Michigan Medical Service Schedule of Benefits for such surgical procedure, is \$20 or more.

Michigan's complete medical care program was offered, as has been shown, at barely half cost and was discontinued because of lack of public interest. Rates for the surgical care program were established to cover twice the amount of surgery that is normally required by the Michigan population. At one time, however, the amount of surgery required by Michigan Medical Service subscribers was nearly four times the normal requirement, and two upward rate adjustments consequently were necessary. The deficit experienced by Michigan Medical Service reached a maximum of \$504,000 in 1942 and imperiled the operation of the entire program until changes in rates and in procedures brought about liquidation of the deficit and the strong financial position which Michigan Medical Service enjoys today.

While it maintains a separate corporate entity, Michigan Medical Service has joined with Michigan Hospital Service, the Blue Cross Plan providing for hospital care, in the development of a joint health care program. Thus the subscriber enrolls simultaneously for hospital, surgical and medical care, makes single regular payments, and carries a single identification card which, upon display to the doctor and to the hospital admission clerk, procures service for the subscriber.

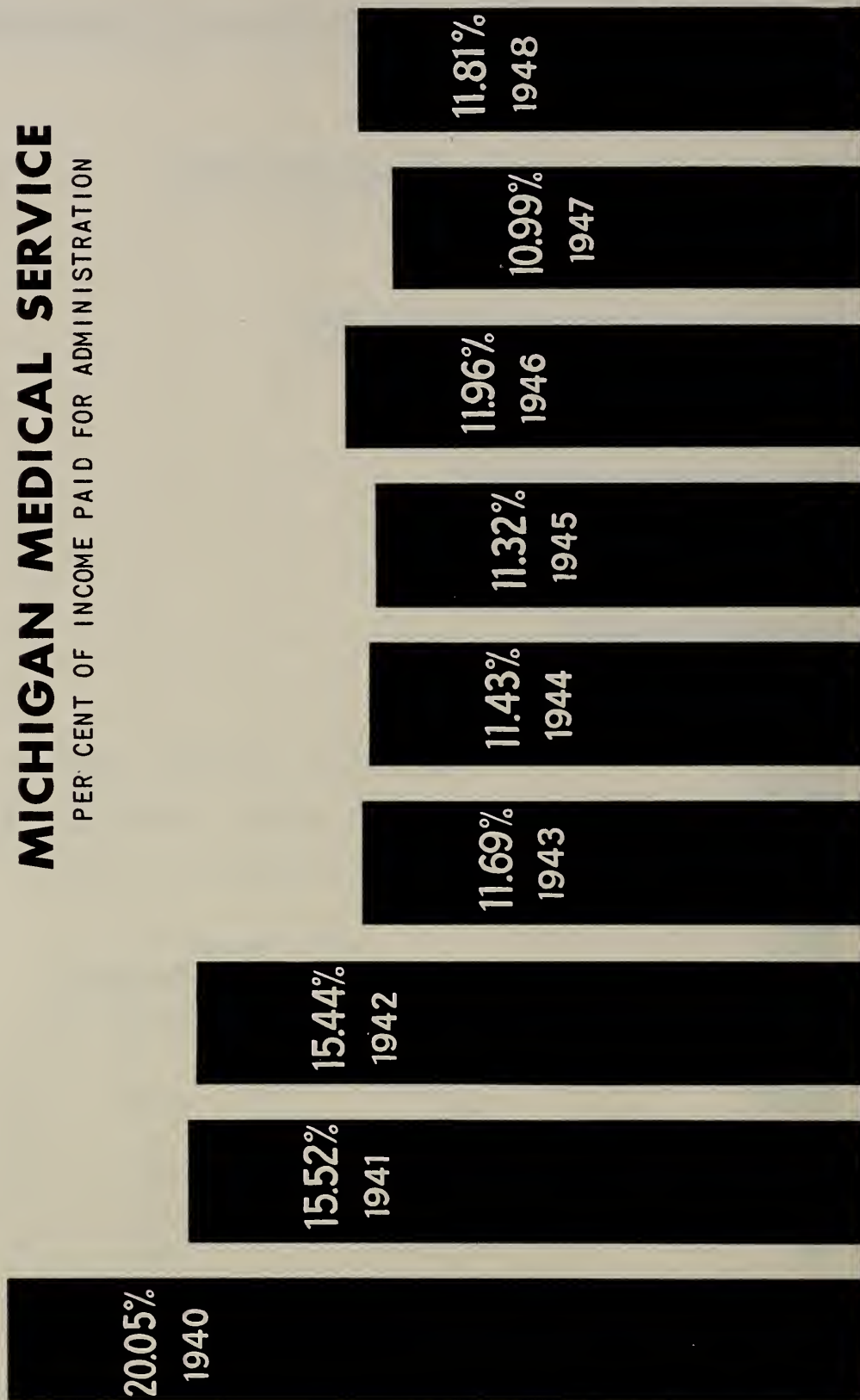
In Michigan, Michigan Hospital Service and Michigan Medical Service are known to the general public and doctors as the "Blue Cross Plans." Nationally, "Blue Cross" indicates voluntary, non-profit *hospital service* organizations like Michigan Hospital Service. Nationally, in the last few years, voluntary, nonprofit medical-surgical plans have adopted the term "Blue Shield" to designate such plans as Michigan Medical Service. In Michigan,

# MICHIGAN MEDICAL SERVICE





**MICHIGAN MEDICAL SERVICE**  
PER CENT OF INCOME PAID FOR ADMINISTRATION



Michigan Medical Service had adopted the term "Blue Cross" and had so called itself before the term "Blue Shield" was suggested. Michigan Hospital Service and Michigan Medical Service, therefore, in the early days of prepaid plans, adopted an emblem which is a combination of the national Blue Cross emblem and Blue Shield emblem. The Michigan emblem is the Blue Cross, deleting the emblem of the American Hospital Association and superimposing the shield and caduceus of the Blue Shield.

Thus far, the great majority of subscribers to the Michigan program are employes in business and industrial establishments. Several years ago Michigan Medical Service and Michigan Hospital Service began experiments and research, looking toward the opening of enrollment to every resident of the state who wishes this protection.

For the enrollment of farmers a very active program is under way. Over 650 farm groups already have been enrolled through Farm Bureaus, Granges, farmer co-operatives and the Farm Security Administration.

For the enrollment of the self-employed and others who do not belong to an eligible group, Michigan Medical Service and Michigan Hospital Service have a program of community enrollment through which interested persons in practically every part of the state, periodically, are given the opportunity to obtain protection through these two organizations.

For persons who cannot afford to pay, Michigan Medical Service and Michigan Hospital Service are seeking a means of co-operating with the government, whereby "wards of government" and the indigent will not be segregated in charity facilities but will be entitled to the same sort of service as any subscriber and, for all practical purposes, will be indistinguishable from subscribers paying their own way. The program providing for the care of veterans in service-connected cases offers a suggestion as to how this objective may be realized.

The existence of Michigan Medical Service provided a convenient means for meeting the needs of veterans with service-connected disabilities. In Michigan, thousands of such veterans have been permitted to go to their own physicians rather than to a veterans facility for examinations or treatments. Michigan Medical Service pays the doctors for these cases just as it makes payment for services provided to regular subscribers, and in

turn, is reimbursed by the Veterans Administration. Not only has this system helped relieve the great pressure on veterans facilities, but it also has made it much easier for many veterans to receive needed care.

In addition, Michigan Medical Service could, in conjunction with government, offer relief recipients and welfare clients the same sort of personal service as that being provided to Michigan Medical Service subscribers and to veterans.

The administration and operation of a medical-surgical care plan is much more complex than the operation of a hospital care plan because of the wide variety of services that must be covered and the number of persons (doctors of medicine) who must render individual services under the plan. A hospital care plan provides for relatively few services offered by relatively few institutions, whereas a medical care plan encompasses hundreds of services offered by thousands of individual doctors. The problem of the medical-surgical plan is, therefore, that of gaining actuarial experience covering a wide range of services and of arranging for the participation of many doctors.

While it was not the first medical care plan sponsored by the medical profession, Michigan Medical Service happened to develop procedures which have made it the most successful of the doctor-sponsored nonprofit medical plans now in operation. The procedures developed in Michigan consequently have been accepted as a pattern for many other plans now operating or being organized.

Michigan Medical Service, as of March 31, 1949, had 1,329,044 subscribers and, as of that date, had paid \$34,653,626.04 to doctors for services provided in 575,574 cases. One of every five residents of Michigan is protected by the plan, and the growth in number of subscribers last year alone amounted to 376,280 persons. It is expected that Michigan Medical Service will protect a great majority of the people of Michigan within the next few years.

Michigan is a single state and cannot speak for the balance of the nation. However, it is believed that the grass roots approach, which is highly sensitive to public demand and local requirements, has been fundamentally responsible for the development of the Michigan plan. It is characteristic of the more or less spontaneous growth of developments such as these that they spread very rapidly,



MICHIGAN MEDICAL SERVICE

DETROIT, MICHIGAN

ENROLLMENT MARCH 1949	1,329,044	GRAND TOTAL PAID TO ALL DOCTORS	
SUBSCRIBERS	533,745	YEAR 1940 THRU MARCH 1949	\$ 34,653,626.04
CONTRACTS		INCIDENCE OF SURGICAL SERVICE	
STATISTICS		PER 1000 MEMBERS PER YEAR	
MARCH 1949		1940	162
AMOUNT PAID FOR SERVICES		1944	107
VETERANS CARE \$ 94,716.25		1948	127 1ST SIX MONTHS
ALL OTHERS \$ 573,952.58		NUMBER OF SURGICAL CASES	
TOTAL \$ 668,668.83		1940	7,625
YEAR 1948		1941	21,152
AMOUNT PAID FOR SERVICES		1942	48,388
VETERANS CARE \$ 1,023,468.87		1943	53,397
ALL OTHERS \$ 6,102,443.37		1944	66,844
TOTAL \$ 7,125,922.24		1945	84,660
IN 1948 OUR INCOME DOLLAR WAS		1946	88,391
SPENT AS FOLLOWS :		1947	99,734
FOR SERVICES RENDERED 84¢		1948	106,383
FOR ADMINISTRATION 12¢		TOTAL	576,574
FOR RESERVE 4¢			

MICHIGAN MEDICAL SERVICE WAS THE FIRST BLUE SHIELD PLAN  
IN THE UNITED STATES TO ENROLL ITS  
1,000,000TH SUBSCRIBER

THE LARGEST BLUE SHIELD PLAN IN THE WORLD

with each locality throughout the nation borrowing the best features of local accomplishments elsewhere. Thus, a number of the features of the Michigan program have been adapted elsewhere in the nation, just as the Michigan program has borrowed the successful features of similar plans in other parts of the country.

A number of the early medical care plans met failure or only moderate success. Michigan Medical Service is one of those which enjoyed such rapid progress that it has helped to establish positive proof that a voluntary medical-surgical care plan under sponsorship of the medical profession is practical and is preferred by the people.

From our experience in Michigan, we are cer-

tain that a true spirit of co-operation between voluntary health care organizations and governmental health agencies can produce for the nation the most effective, enduring and progressive system of health care. Voluntary health organizations should not attempt to do the whole job any more than should government attempt to do so, for the reason that any monopoly of health services, whether economic or otherwise, inevitably will lead to degeneration of the entire system. For greatest continued progress, it is imperative that there be maintained the sort of health care system which is characterized by a proper spirit of competition and by the existence of natural balances and checks in the best American tradition.

## Michigan Medical Service Enrollment

*The fundamental principle of Blue Cross and Blue Shield has been group enrollment. By that method no one would have to pay unusually large charges for their health services because the American principle of insurance would be applicable immediately. By a coincidence the first large group to take Michigan Medical Service benefits were the employes of the Ford Motor Company, and this same group when it re-enrolled increased our membership over the 1,000,000 mark.*

### Enrollment in Industry

With enrollment of the Ford Motor Company in November, total enrollment of Michigan's Blue Cross increased 27.5 per cent during 1948 and brought membership past the 1,500,000 mark.

In addition to the Ford group, 932 other new industrial, Farm Bureau and business groups—or an average of seventy-five groups a month—were enrolled. Among these were Eastern Airlines, the Wetzlauffer Manufacturing Company, the Bendix Aviation Corporation, the Flint Trolley Coach Company and the employes of the City of Allegan.

Through the new subscribers in these groups, 41,650 persons are protected under the hospital care plan, 29,400 persons have the hospital-surgical protection, and 9,800 persons are protected under the hospital-medical-surgical plan.

Although there is a 75 per cent requirement for enrollment of groups in the surgical and medical-surgical plans, there is greatly increased interest in these plans. In consequence, the surgical plan was made available for the first time in 528 groups previously enrolled for hospital service only. As result of enrollment of these 528 groups in the hospital-surgical plan, 26,950 persons now have the

additional surgical protection. A number of these groups also added the medical-surgical plan, making 18,510 persons eligible for the medical-surgical protection.

Blue Cross enrollment representatives and district managers conducted 3,600 resolicitations during the year in already-enrolled groups. These resolicitations resulted in more than 100,450 people being protected under the hospital plan, more than 142,100 under the surgical plan, and nearly 12,250 under the medical-surgical plan.

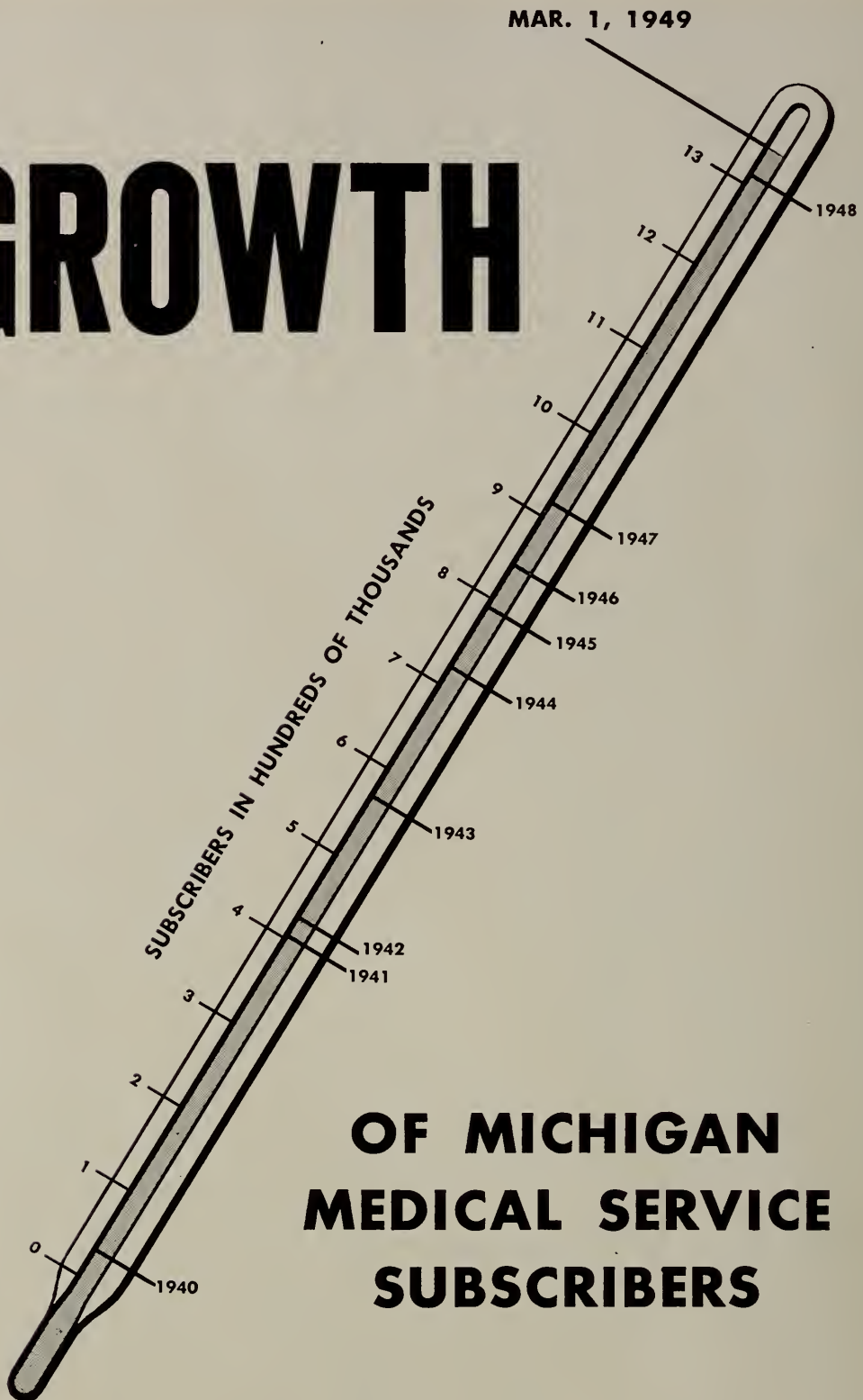
In October, the management-union board of trustees of the Kaiser-Frazier Company selected Blue Cross as the best protection for Kaiser-Frazier employes. As result of this selection, 100 per cent of all Kaiser-Frazier hourly employes were Blue Cross enrolled, the full cost of semi-private hospital-surgical protection being paid for by the trustees from a fund contributed by the company in accordance with its agreement with the union.

### Enrollment in Rural Areas

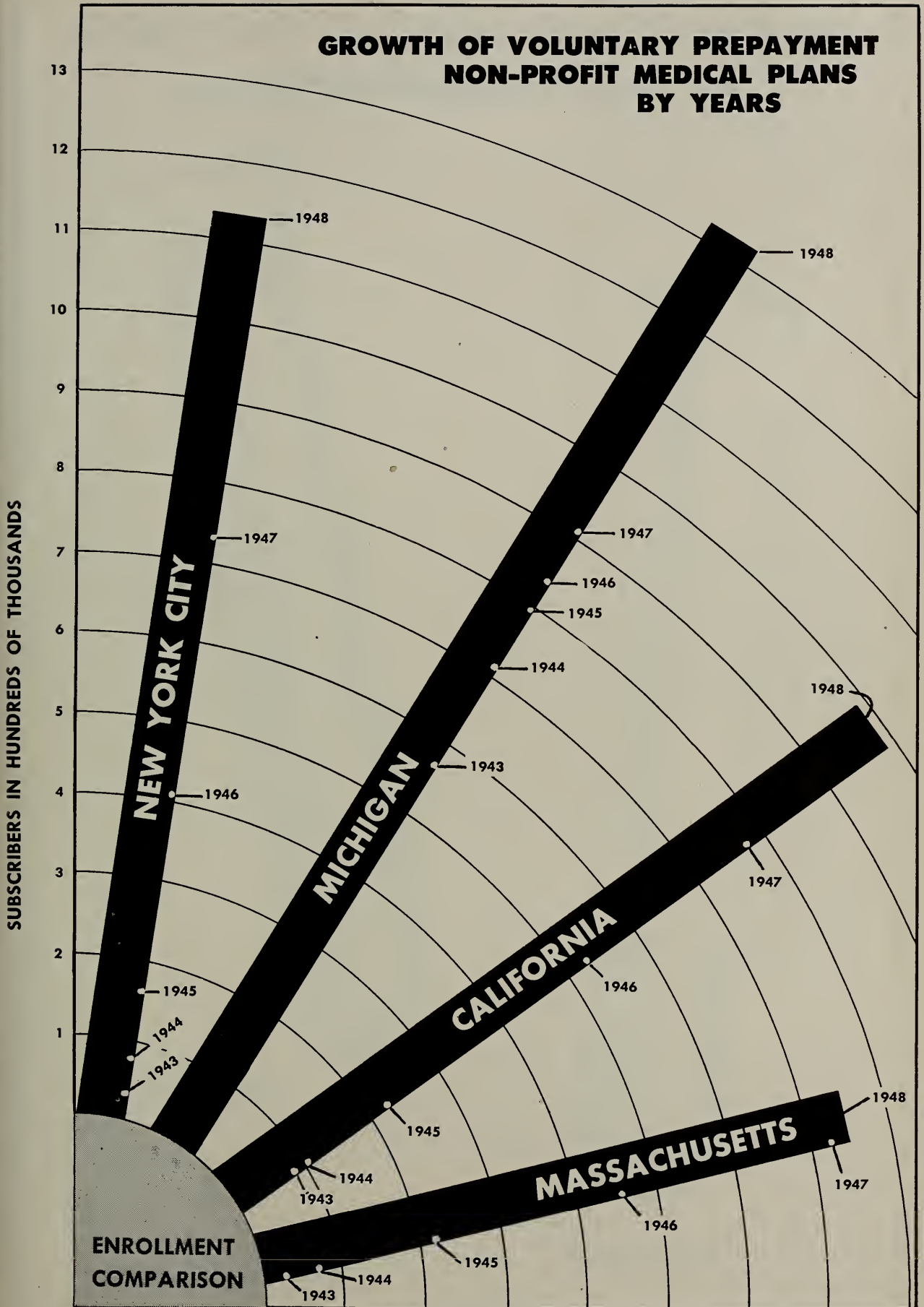
At the close of 1948, approximately 30,000 persons were enrolled in Blue Cross through 580 Michigan Farm Bureau groups. At the same time,



# GROWTH



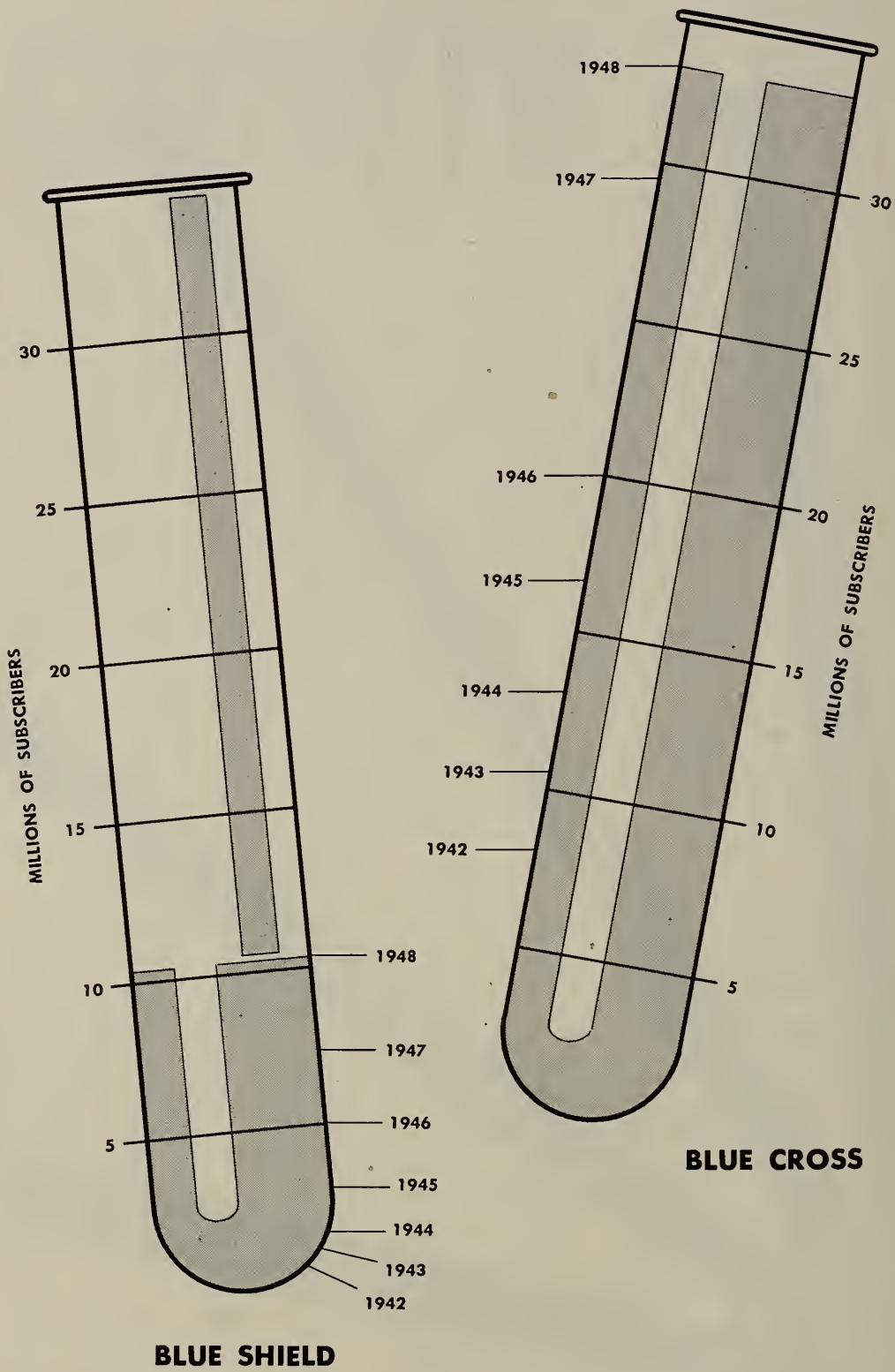
## OF MICHIGAN MEDICAL SERVICE SUBSCRIBERS





# GROWTH OF BLUE CROSS and BLUE SHIELD

## All Plans Combined Enrollment



3,000 members of fifty Grange groups were also Blue Cross enrolled.

The rural phase of Blue Cross enrollment is handled on a group basis, largely through local Farm Bureau and local Grange organizations. A definite percentage of membership enrollment is required, and the number is established by a roster of membership provided by the group prior to its acceptance.

Although Blue Cross enrollment among Grange members leaves much to be desired, Grange members have become increasingly interested in the Blue Cross program. Blue Cross activities among Grange groups are now being organized on a "down-the-line" basis in a similar manner to the organization of Farm Bureau-Blue Cross activities, and the State Grange Deputy has undertaken the program as part of his work.

Payments to Blue Cross from the rural groups are on a collection system. Each organized county has a county-wide Blue Cross secretary through whom Blue Cross functions. Yearly training conferences are held for the various local Blue Cross secretaries in each county. Blue Cross district managers or rural enrollment representatives appear before the conferences, explain the program, and give assistance in setting up the records.

A total of 9,000 new Blue Cross members were added through 114 new Farm Bureau groups in 1948. This was a greater increase in enrollment among rural groups than in any previous year, and much time was devoted to orientation and education of these organizations in the matter of enrollment and servicing subscribers.

Numerous rural groups have added the surgical or the medical-surgical service to the hospital-only plan which previously protected them. The result is that now more than half the rural subscribers have full hospital and surgical service, and most of the new groups enrolling take all three services.

The newest procedure introduced among the rural groups is Blue Cross enrollment on a county-wide basis. Blue Cross membership has formerly been available only through the Farm Bureau Discussion Groups. As all Farm Bureau members do

not belong to Discussion Groups, the procedure will give an opportunity for Blue Cross membership to a larger number of Farm Bureau members.

### Community Enrollment

In its effort to reach the people not eligible for Blue Cross protection through employe and other already established groups, Blue Cross has increasingly stepped up community enrollment activities in towns and cities throughout the state. Community enrollment campaigns were conducted in twenty-one communities during 1948; eight campaigns have been held since January 1, and fifteen others are tentatively scheduled for the remainder of this year.

Two procedures have been followed in the community enrollment drives. One of the procedures calls for considerable time and expense for promotional activities; arrangements are made for dinner and luncheon meetings of civic and business leaders, doctors, hospital representatives and volunteers; all business places are canvassed; special literature is distributed to school children; store window displays, posters, table mats in restaurants, and motion picture films are used throughout the town; newspaper publicity is planned through co-operation with the local newspaper, and newspaper display advertisements are scheduled.

The other procedure is simple, requiring only publicity, advertising, radio spot announcements, and an enrollment headquarters in the town in which a Blue Cross participating hospital is located.

The average number of people enrolled through community enrollment activities has been slightly less than 5 per cent of the population of the towns in which the drives have been conducted. However, the campaigns have served a definite need and purpose in "discovering" prospective small groups which are overlooked in any other kind of canvass.

In addition, it is felt that community enrollment activities have done much to re-establish in the minds of local people that the Blue Cross Plans are operated by the doctors and the hospitals as their own voluntary programs.



# The Veteran's Program YEAR 1948

MICHIGAN MEDICAL SERVICE

NUMBER OF AUTHORIZATIONS

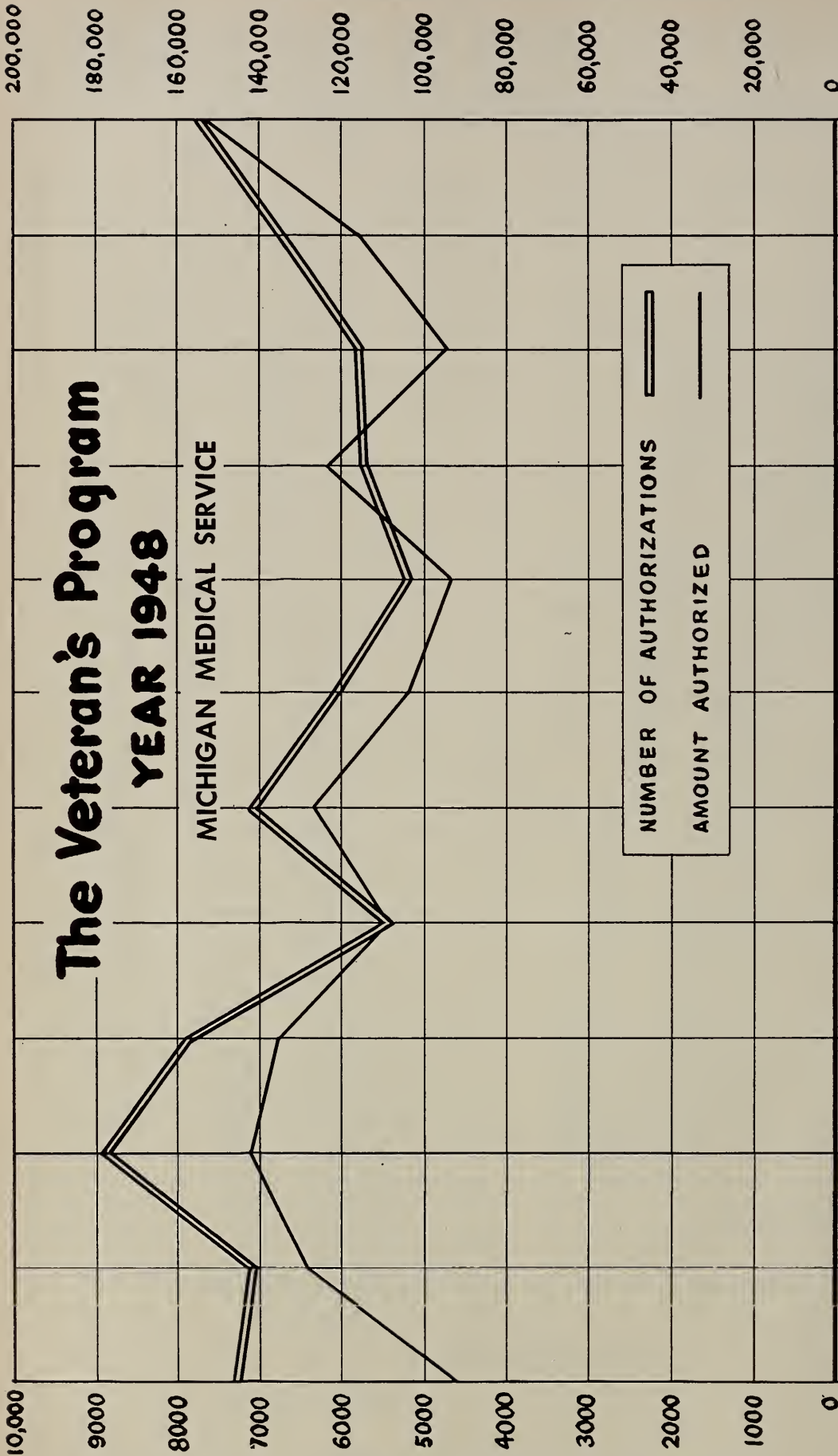
AMOUNT AUTHORIZED - IN DOLLARS

MICHIGAN MEDICAL SERVICE

NUMBER OF AUTHORIZATIONS

AMOUNT AUTHORIZED

ADMINISTRATIVE PER CENT



## Medical Service and Socialized Medicine

By Hon. Arthur H. Vandenberg

Senator from Michigan

THERE IS vast propaganda today for socialized medicine. I think it would destroy precious personal relationships in the American way of life, produce wholesale mediocrity in the skills which serve the sick, and saddle us with a new and appalling bureaucracy. But this does not require me to blind my eyes to the existence of a crushing and well-nigh universal sick problem in the lives of millions of our citizens. It is a problem that must be met. But we have a choice of methods. One is voluntary and therefore typically American. The other is involuntary and therefore typically bureaucratic. The latter is socialized medicine. The for-

mer is co-operative medicine. I expect the American people and the Republican Party to choose the former. I want my party to look at the great, humanitarian, co-operative effort of the Blue Cross, for example, which represents co-operation and not compulsion. It comes to finest fruition here in Michigan where one of four of our people already thus have cheaper and better protection than they would ever get from socialized medicine. Probably two out of four of our Michigan people are covered by this or other voluntary plans.—  
*Congressional Record*, February 14, 1949.

## Associated Medical Care Plans

THE ASSOCIATED Medical Care Plans, often referred to as "AMCP" or "Blue Shield," had their beginnings in the fall of 1942, when the few plans then in existence decided to get together in an attempt to help each other in problems of administration of voluntary nonprofit medical service plans.

A meeting held in Detroit resulted in the formation of the Council of Medical Service Plans of America in the spring of 1943. This was an informal association without charter, by-laws, or even any staff. Michigan Medical Service supplied much of the impetus toward the organization and its activity, as well as its chairman for the two years of its existence. Its activities consisted mostly of discussions held at times and places related to other medical group meetings.

The plans, originally eleven in number, had by 1945 grown to forty-three, and felt the need of a more formalized organization and a much expanded and co-ordinated activity in behalf of its member plans.

The present AMCP was organized in 1946 at meetings held at the AMA Headquarters in Chicago, and secured an Illinois nonprofit charter with a grant of \$25,000 from the AMA to get it started. It is now sustained by dues from the member plans. With a membership of sixty-two plans, it now

represents all qualified plans in the United States with the exception of four.

Its purposes are as set forth in its constitution:

"The objects of the corporation are to promote the establishment and operation of such nonprofit, voluntary medical care plans throughout the United States, its territories and possessions, and Canada as will adequately meet the health needs of the public and maintain the high quality of medical care rendered by the medical profession. Inherent in its objects is a recognition that state and local medical care plans should be autonomous in their operation so that the needs, facilities, resources and practices of their respective areas can be given due consideration, but that the health and welfare of the public is advanced by the co-ordination, through the medium of this corporation, of methods, coverages, operations and actuarial data."

Its affairs are directed by thirty commissioners, twelve plan executives, twelve plan trustees and six representatives of the Council on Medical Service of the AMA. The officers elected by the commission are:

President—Harold L. Schriener, M.D.

Vice President—R. L. Novy, M.D.

Secretary—O. B. Owens, M.D.

Treasurer—Jay C. Ketchum.

Responsible for the execution of its affairs in its Chicago headquarters are P. R. Hawley, M.D.,



as chief executive officer, and Mr. F. E. Smith, director.

AMCP has done much to encourage the development of new plans in state and local medical societies, assisted many plans with operating problems, particularly in the field of enrollment, statistics, accounting and plan relations with the public, the profession and with companion hospital service plans.

The problem of satisfactory enrollment methods for employees of national employers has been and is receiving a great deal of attention by the AMCP. There has been some difference of opinion in this matter. AMCP and the Council on Medical Service of the AMA have not always agreed on some proposals.

It has been pointed out that the AMCP is representative of the medical profession as is the Council on Medical Service or any other group within the AMA, inasmuch as the board of member plans are, in one way or another, chosen by the local or state societies, much as they select their delegates to the AMA, and in turn, the boards of the plans selected their representatives in AMCP and its commissioners.

Visitors and delegates to the annual meetings of the AMA in Atlantic City in June will be welcomed at the "Blue Shield" booth in the Exhibition Hall, where literature and information will be available.

## THE MEANS

(Continued from Page 740)

At the Saint Louis Meeting of the American Medical Association, the House of Delegates restrained the Blue Shield Commission from forming certain national organizations for the better distribution of national sales problems. Just before the Blue Cross-Blue Shield conference which convened April 17, 1949, the American Medical Association, through its Council on Medical Service and its Board of Trustees, denied all responsibility for the Blue Shield Commission, except the right to approve or disapprove of its organizations, as well as other voluntary prepayment medical care plans.

Has the government used its power of prosecution to restrain official medical society support of the voluntary nonprofit health care plans, so that Oscar Ewing's pronouncement that they are inadequate to care for the American People may seem well founded?

## GENERAL PRACTICE SECTIONS IN HOSPITALS

The May 7 issue of the *Journal of the American Medical Association* contained the annual statistical report on hospital services in the United States for the year 1948. The data is collected annually by the Council on Medical Education and Hospitals of the American Medical Association. Included in this report was a summary of data on general practice sections in hospitals. The Council included in their annual census report for the year 1947 the following question: "In the organization of the medical staff, has the hospital established a general practice section?" Of the 4,539 general hospitals registered, 837 answered yes, 2,521 said no, and 1,181 did not reply to this question.

The majority of the hospitals that reported such sections were operated by churches or non-profit associations. Classified by bed capacity these hospitals were distributed as follows:

15 beds or less.....	40
16- 25 beds.....	101
26- 50 beds.....	171
51-100 beds.....	198
101-200 beds.....	190
201-300 beds.....	85
Over 300.....	52

Total Hospitals.....837

Although most of the hospitals with general practice sections in 1947 were medium sized, both very large and very small hospitals are included. It is apparent that size in no way precludes a general practice section.

## S. 1679 CO-OPERATIVES

By Mr. Humphrey, of Minnesota, May 20:

Suggested amendment. To provide a program of national health insurance and public health and to assist in increasing the number of adequately trained professional and other health personnel.

Referred to the Committee on Labor and Public Welfare.

*Comment:* Provides the right for nonprofit associations and consumer co-operatives to hire physicians on a contract basis.

## COWS SHOULD ALSO SEE DENTIST TWICE A YEAR

"See your dentist twice a year" is as good advice for Bossy as it is for Bossy's boss, declared Dr. L. M. Hurt, president of the American Veterinary Medical Association in Chicago. Cows are often benefited by dental attention, and return profit on the investment in better milk yield, he pointed out.

A typical and serious bovine dental ailment described by Dr. Hurt is known as "scissor-mouth." This is a condition wherein the lower jaw is considerably narrower than the upper, making it impossible for the poor animal to eat comfortably unless her teeth are dressed.—*Science News Letter*, May 21, 1949.

# MICHIGAN STATE MEDICAL SOCIETY

## The 84th Annual Session and Postgraduate Conference



O. O. BECK, M.D.  
Birmingham  
*Council Chairman*



E. F. SLADEK, M.D.  
Traverse City  
*President*



JOHN S. DETAR, M.D.  
Milan  
*Speaker*

### OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, on September 19, 20, 21, 22, 23, 1949. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

E. F. SLADEK, M.D.  
*President*

O. O. BECK, M.D.  
*Council Chairman*

J. S. DETAR, M.D.  
*Speaker*

R. H. BAKER, M.D.  
*Vice Speaker*

Attest:

L. FERNALD FOSTER, M.D.  
*Secretary*



L. FERNALD FOSTER, M.D.  
Bay City  
*Secretary*



R. H. BAKER, M.D.  
Pontiac  
*Vice Speaker*

### TWO-DAY SESSION OF HOUSE OF DELEGATES, SEPTEMBER 19-20, 1949

The 1949 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 19 at 10:00 a.m. The business of the House of Delegates will be transacted in the Pantlind Hotel, Grand Rapids.

The House also will meet Monday at 8:00 p.m. and on Tuesday, September 20 at 10:00 a.m. and 8:00 p.m.

The intervals between meetings of the House of Delegates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

### Seating of Delegates

"A delegate once seated shall remain a Delegate throughout the entire session and for one year thereafter until the next Session of this House of Delegates, and his place shall not be taken by any other Delegate or Alternate, provided that in case of emergency the House of Delegates may seat a duly accredited Alternate from his component County Society. Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved.—MSMS By-Laws, Chapter 8, Section 6.



# Michigan State Medical Society

## Past Presidents 1866-1947

- |  |  |
|--|--|
| 1866—*C. M. Stockwell, Port Huron                  | 1904—*B. D. Harison, Sault Ste. Marie  |
| 1867—*J. H. Jerome, Saginaw                        | 1905—*David Inglis, Detroit            |
| 1868—*Wm. H. DeCamp, Grand Rapids                  | 1906—*Charles B. Stockwell, Port Huron |
| 1869—*Richard Inglis, Detroit                      | 1907—*Hermon Ostrander, Kalamazoo      |
| 1870—*I. H. Bartholomew, Lansing                   | 1908—*A. F. Lawbaugh, Calumet          |
| 1871—*H. O. Hitchcock, Kalamazoo                   | 1909—*J. H. Carstens, Detroit          |
| 1872—*Alonzo B. Palmer, Ann Arbor                  | 1910—*C. B. Burr, Flint                |
| 1873—*E. W. Jenk, Detroit                          | 1911—*D. Emmett Welsh, Grand Rapids    |
| 1874—*R. C. Kedzie, Lansing                        | 1912—*Wm. H. Sawyer, Hillsdale         |
| 1875—*Wm. Brodie, Detroit                          | 1913—*Guy L. Kiefer, Detroit           |
| 1876—*Abram Sager, Ann Arbor                       | 1914—*Reuben Peterson, Ann Arbor       |
| 1877—*Foster Pratt, Kalamazoo                      | 1915—*A. W. Hornbogen, Marquette       |
| 1878—*Ed. Cox, Battle Creek                        | 1916—*Andrew P. Biddle, Detroit        |
| 1879—*George K. Johnson, Grand Rapids              | 1917—*Andrew P. Biddle, Detroit        |
| 1880—*J. R. Thomas, Bay City                       | 1918— Arthur M. Hume, Owosso           |
| 1881—*J. H. Jerome, Saginaw                        | 1919—*Charles H. Baker, Bay City       |
| 1882—*Geo. W. Topping, DeWitt                      | 1920—*Angus McLean, Detroit            |
| 1883—*A. F. Whelan, Hillsdale                      | 1921—*Wm. J. Kay, Lapeer               |
| 1884—*Donald Maclean, Detroit                      | 1922—*W. T. Dodge, Big Rapids          |
| 1885—*E. P. Christian, Wyandotte                   | 1923—*Guy L. Connor, Detroit           |
| 1886—*Charles Shepard, Grand Rapids                | 1924—*C. C. Clancy, Port Huron         |
| 1887—*T. A. McGraw, Detroit                        | 1925—*Cyrenus G. Darling, Ann Arbor    |
| 1888—*S. S. French, Battle Creek                   | 1926— J. B. Jackson, Kalamazoo         |
| 1889—*G. E. Frothingham, Detroit                   | 1927— Herbert E. Randall, Flint        |
| 1890—*L. W. Bliss, Saginaw                         | 1928— Louis J. Hirschman, Detroit      |
| 1891—*George E. Ranney, Lansing                    | 1929— J. D. Brook, Grandville          |
| 1892—*Charles J. Lundy (died before taking office) | 1930—*Ray C. Stone, Battle Creek       |
| *Gilbert V. Chamberlain, Flint, Acting President   | 1931—*Carl F. Moll, Flint              |
| 1893—*Eugene Boise, Grand Rapids                   | 1932— J. Milton Robb, Detroit          |
| 1894—*Henry O. Walker, Detroit                     | 1933—*George LeFevre, Muskegon         |
| 1895—*Victor C. Vaughan, Ann Arbor                 | 1934—*R. R. Smith, Grand Rapids        |
| 1896—*Hugh McColl, Lapeer                          | 1935— Grover C. Penberthy, Detroit     |
| 1897—*Joseph B. Griswold, Grand Rapids             | 1936— Henry E. Perry, Newberry         |
| 1898—*Ernest L. Shurly, Detroit                    | 1937— Henry Cook, Flint                |
| 1899—*A. W. Alvord, Battle Creek                   | 1938— Henry A. Luce, Detroit           |
| 1900—*P. D. Patterson, Charlotte                   | 1939— Burton R. Corbus, Grand Rapids   |
| 1901—*Leartus Connor, Detroit                      | 1940— Paul R. Urmston, Bay City        |
| 1902—*A. E. Bulson, Jackson                        | 1941— Henry R. Carstens, Detroit       |
| 1903—*Wm. F. Breakey, Ann Arbor                    | 1942— H. H. Cummings, Ann Arbor        |
| *Deceased.   | 1943— C. R. Keyport, Grayling          |
|  | 1944— A. S. Brunk, Detroit             |
|  | 1945— R. S. Morrish, Flint             |
|  | 1946— Wm. A. Hyland, Grand Rapids      |
|  | 1947—P. L. Ledwidge, Detroit           |

# Michigan State Medical Society

## The 84th Annual Session and Postgraduate Conference and Cancer Control Day

Pantlind Hotel-Civic Auditorium, Grand Rapids,

September 21-22-23-24, 1949

### INFORMATION

- **GRAND RAPIDS WILL BE HOST TO MSMS IN SEPTEMBER.**

- **The Program** of the General Assembly at the 84th Annual Session and Postgraduate Conference and at the Cancer Control Day of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world which always grace the annual conventions of the Michigan State Medical Society; they insure a valuable concentrated postgraduate course in all phases of medicine and surgery for the busy practitioners of Michigan and neighboring states and the Province of Ontario, on September 21-22-23-24, 1949.

- **Registration**, Tuesday afternoon through Friday afternoon, September 20-23, Civic Auditorium. Advance registration—on Tuesday or early Wednesday morning—will save your time. Present your State Medical Society or Canadian Medical Association membership card to expedite registration.

No registration fee for AMA and CMA members.

Doctors of Medicine, who are not members of the American Medical Association or the Canadian Medical Association, will be accorded the privileges of the MSMS Annual Session upon payment of a \$5 registration fee.

*Register as soon as you arrive. Admission by badge only.*

- **Income Tax Deduction**—Expenses incurred in attending conventions of professional societies have consistently been held deductible in the income tax returns of doctors, both in the United States and Canada. Certificates of attendance available upon request to 2020 Olds Tower, Lansing 8, Michigan.

- **All Subjects** on the MSMS Annual Session and the Cancer Control Day Programs are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

- **Postgraduate Credits** given to every MSMS member who attends MSMS Annual Session.

- **Six General Assemblies** and one General Meeting—Thirteen Section Meetings—Twenty-one Discussion Conferences on September 21-22-23.

- **Public Meeting.** The General Meeting of Wednesday, September 21, 8:30 p.m.—Officers' Night—will be open to the public. Invite your patients and friends to hear an internationally famous personage present the Biddle Lecture, Ballroom, Pantlind Hotel.

- **Papers Will Begin and End on Time.** This scientific meeting will feature by-the-clock promptness and regularity.

- **MSMS House of Delegates** convenes Monday, September 19, at 10:00 a.m., Ballroom, Pantlind Hotel.

It will hold two meetings on Monday, at 10:00 a.m. and at 8:00 p.m., also two meetings on Tuesday, September 20, at 10:00 a.m. and at 8:00 p.m.

- **One-hundred and Twenty-one Technical Exhibits and Eleven Scientific Exhibits** will contain much of interest and value. Intermissions to view the exhibits have been arranged.

**Please Register at Every Booth.**

### Cancer Control Day

- A special program on Cancer Control will be presented in the Ballroom of the Pantlind Hotel on Saturday morning, September 24. All doctors are urged to remain for these fine scientific presentations.

- **J. Duane Miller, M.D.,** Grand Rapids, is General Chairman of the Grand Rapids Committee on Arrangements for the 1949 MSMS Annual Session and Postgraduate Conference.

Press Relations Committee for the Scientific session: **C. A. Payne, M.D.,** Chairman, **G. T. Aitken, M.D.,** and **P. W. Kniskern, M.D.,** all of Grand Rapids.

- **Transportation**—The C. & O. Streamliners from Detroit to Grand Rapids afford a convenient means of transportation to the MSMS Annual Session for hundreds of physicians in the central and southeastern parts of the State.

- **The Michigan Medical Assistants Conference** is scheduled for Thursday, September 22, with registration in the Pantlind Hotel beginning at 2:00 p.m.; cocktails at 6:00 p.m. and dinner at 7:00 p.m. The Medical Assistants group is composed of doctors' office secretaries and nurses.

- **Cabaret-Style Dance and Entertainment**, with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom, Pantlind Hotel, Thursday evening, September 22. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.

- **Members of Michigan Medical Service** will meet in annual session Tuesday, September 20, Ballroom, Pantlind Hotel, at 2:00 p.m., following the MMS luncheon at 1:00 p.m. in the Schubert Room.

- **Information of Practical Value in Daily Practice** will be found at the Michigan State Medical Society Annual Session and at the Cancer Control Day.

**SAVE AN ORDER FOR THE EXHIBITOR AT  
THE MICHIGAN STATE MEDICAL SOCIETY  
ANNUAL SESSION**



# MICHIGAN STATE MEDICAL SOCIETY

## The 84th Annual Session and Postgraduate Conference

Pantlind Hotel, Grand Rapids, September 19, 20, 21, 22, 23, 1949

### HOUSE OF DELEGATES—ORDER OF BUSINESS\*

#### MONDAY, SEPTEMBER 19

Ballroom, Pantlind Hotel, Grand Rapids

##### 10:00 a.m.—First Meeting

1. Call to order by Speaker.
2. Report of Committee on Credentials
3. Roll call
4. Appointment of Reference Committees
  - (a) On Officers' Reports
  - (b) On Reports of The Council
  - (c) On Reports of Standing Committees
  - (d) On Reports of Special Committees
  - (e) On Constitution and By-Laws
  - (f) On Resolutions
  - (g) On Special Memberships
  - (h) Others
5. Speaker's Address—J. S. DeTar, M.D., Milan
6. President's Address—E. F. Sladek, M.D., Traverse City
7. President-Elect's Address—W. E. Barstow, M.D., St. Louis
8. Annual Report of The Council—O. O. Beck, M.D., Birmingham, Chairman
9. Report of Delegates to American Medical Association—L. G. Christian, M.D., Lansing, Chairman
10. Report of Commission on Health Care—R. L. Pino, M.D., Detroit, Chairman
11. Resolutions\*\*
12. Reports of Standing Committees
  - A. Committee on Postgraduate Medical Education
  - B. Preventive Medicine Committee:
    - (1) Rheumatic Fever Control Committee
    - (2) Cancer Control Committee
    - (3) Maternal Health Committee
    - (4) Venereal Disease Control Committee
    - (5) Tuberculosis Control Committee
    - (6) Industrial Health Committee

- (7) Mental Hygiene Committee
- (8) Child Welfare Committee
- (9) Iodized Salt Committee
- (10) Geriatrics Committee
  - (a) Sub-Committee on Diabetes Control
  - (b) Sub-Committee to Study Problem of Caring for Aged
- (11) Committee on Infectious Diarrhea
- C. Committee on Distribution of Medical Care
- D. Committee on Public Relations (and sub-committees)
- E. Committee on Ethics
- F. Legislative Committee

##### 13. Reports of Special Committees

- A. Committee on State Veterans Affairs
- B. State Interprofessional Committee
- C. Beaumont Memorial Committee
- D. Scientific Radio Committee
- E. Advisory Committee to Woman's Auxiliary
- F. Liaison Committee with State Medical Assistants Society
- G. Advisory Committee to National Foundation for Infantile Paralysis
- H. Committee on Increase of Medical Students Graduated from Michigan Medical Schools
- I. Committee of Six to Study Basic Science Act and Medical Practice Act

Reports of the Committees of the Council Are Included in the Annual Report of the Council

#### MONDAY, SEPTEMBER 19

Ballroom, Pantlind Hotel, Grand Rapids

##### 8:00 p.m.—Second Meeting

14. Supplementary Report of Committee on Credentials
15. Roll call
16. Unfinished Business

\*See the Constitution Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

\*\*All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 8, Section 10-m)

## MONDAY, SEPTEMBER 19

17. New Business\*\*\*
18. Reports of Reference Committees
  - (a) On Officers Reports
  - (b) On Reports of The Council
  - (c) On Reports of Standing Committees
  - (d) On Reports of Special Committees
  - (e) On Constitution and By-Laws
  - (f) On Resolutions
  - (g) On Special Memberships
  - (h) Others

## TUESDAY, SEPTEMBER 20

Ballroom, Pantlind Hotel, Grand Rapids

10:00 a.m.—Third Meeting

19. Supplementary Report of Committee on Credentials
20. Roll call
21. Unfinished Business
22. New Business
23. Supplementary Reports of Reference Committees
  - (a) On Officers Reports
  - (b) On Reports of The Council
  - (c) On Reports of Standing Committees
  - (d) On Reports of Special Committees
  - (e) On Amendments to Constitution and By-Laws
  - (f) On Resolutions
  - (g) On Special Memberships
  - (h) Others

## TUESDAY, SEPTEMBER 20

Ballroom, Pantlind Hotel, Grand Rapids

8:00 p.m.—Fourth Meeting

24. Supplementary Report of Committee on Credentials
25. Roll call
26. Unfinished Business
27. Supplementary Report of The Council
28. Supplementary Reports of Reference Committees
29. Elections
  - (a) Councilors
    - 14th District—D. W. Myers, M.D., Ann Arbor—Incumbent
    - 18th District—William Bromme, M.D., Detroit—Incumbent
  - (b) Delegates to American Medical Association
    - L. G. Christian, M.D., Lansing—Incumbent
    - W. A. Hyland, M.D., Grand Rapids—Incumbent
  - (c) Alternate Delegates to American Medical Association
    - R. A. Johnson, M.D., Detroit—Incumbent
    - H. H. Cummings, M.D., Ann Arbor—Incumbent
  - (d) President-Elect
  - (e) Speaker of House of Delegates
  - (f) Vice Speaker of House of Delegates

30. Adjournment

## DELEGATES TO MSMS HOUSE OF DELEGATES, 1949

*Names of Alternates appear in Italics*

## Officers

- J. S. DeTar, M.D.  
Milan, Speaker
- R. H. Baker, M.D.  
Peoples Bank Bldg., Pontiac, Vice Speaker
- L. Fernald Foster, M.D.  
919 Washington, Bay City, Secretary
- P. L. Ledwidge, M.D.  
1838 David Whitney Bldg., Detroit, Immediate Past President

## Allegan

- L. F. Brown, M.D., Otsego
- E. B. Johnson, M.D., Allegan*

## Alpena-Alcona-Presque Isle

- W. E. Nesbitt, M.D., Alpena
- F. J. O'Donnell, M.D., Alpena

## Barry

- A. B. Gwinn, M.D., Hastings
- C. A. E. Lund, M.D., Middleville*

## Bay-Arenac-Iosco

- W. S. Stinson, M.D., 101 W. John, Bay City
- A. D. Allen, M.D., 101 W. John, Bay City
- N. R. Moore, M.D., 5th and Madison Ave., Bay City*
- K. S. Haitinger, M.D., Auburn*

## Berrien

- D. W. Thorup, M.D., Benton Harbor
- D. M. Richmond, M.D., St. Joseph*

## Branch

- R. L. Wade, M.D., Coldwater
- H. J. Meier, M.D., Coldwater

## Calhoun

- G. W. Slagle, M.D., 1206 Security Tower, Battle Creek
- H. C. Hansen, M.D., 417 Post Bldg., Battle Creek
- P. P. Bonifer, M.D., 1008 Central Tower, Battle Creek*
- G. A. Zindler, M.D., 1506 Central Tower, Battle Creek*

## Cass

- S. L. Loupee, M.D., Dowagiac
- K. C. Pierce, M.D., Dowagiac*

## Chippewa-Mackinac

- B. T. Montgomery, M.D., Sault Ste. Marie
- D. C. Howe, M.D., Sault Ste. Marie*

## Clinton

- T. Y. Ho, M.D., St. Johns\*
- G. E. Wahl, M.D., St. Johns*

## Delta-Schoolcraft

- O. S. Hult, M.D., Gladstone
- W. A. LeMire, M.D., Escanaba*

## Dickinson-Iron

- D. R. Smith, M.D., Iron Mountain
- L. E. Irvine, M.D., Iron River*

\*\*\*All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 8, Section 10-m)

\*Deceased



**Eaton**

G. C. Stucky, M.D., Charlotte  
Paul Engle, M.D., Olivet

**Genesee**

C. W. Colwell, M.D., 706 Citizens Bank Bldg., Flint  
C. K. Stroup, M.D., 2002 E. Court, Flint  
F. W. Baske, M.D., 1217 Mott Foundation Bldg., Flint  
J. E. Livesay, M.D., 619 Mott Foundation Bldg., Flint  
E. P. Vary, M.D., 608 National Bldg., Flint  
L. M. Bogart, M.D., 1008 Genesee Bank Bldg., Flint  
V. H. Morrissey, M.D., 101 Stockdale Drive, Flint

**Gogebic**

H. A. Pinkerton, M.D., Ironwood  
D. C. Eisele, M.D., Ironwood

**Grand Traverse-Leelanau-Benzie**

D. G. Pike, M.D., Traverse City  
H. L. Weitz, M.D., Traverse City

**Gratiot-Isabella-Clare**

M. G. Becker, M.D., Edmore  
J. L. Rottschaefer, M.D., Alma

**Hillsdale**

L. W. Day, M.D., Jonesville  
O. G. McFarland, M.D., No. Adams

**Houghton-Baraga-Keeweenaw**

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A. D. Aldrich, M.D., Houghton

**Huron**

C. W. Oakes, M.D., Harbor Beach  
C. A. Scheurer, M.D., Pigeon

**Ingham**

R. S. Breakey, M.D., 1211 Bank of Lansing Bldg.,  
Lansing  
L. G. Christian, M.D., 108 E. St. Joseph St., Lansing  
H. W. Wiley, M.D., 300 W. Ottawa, Lansing  
J. M. Wellman, M.D., 301 Seymour, Lansing  
E. J. Robson, M.D., 728 Audubon Rd., E. Lansing  
Milton Shaw, M.D., 320 Townsend, Lansing

**Ionia-Montcalm**

W. L. Bird, M.D., Greenville  
C. M. Hansen, M.D., Stanton

**Jackson**

C. S. Clarke, M.D., 605 Dwight Bldg., Jackson  
J. D. Van Schoick, M.D., Hanover  
C. R. Dengler, M.D., 305 Carter Bldg., Jackson  
J. B. Meads, M.D., 1406 City Bank Bldg., Jackson

**Kalamazoo**

W. A. Scott, M.D., 705 Hanselman Bldg., Kalamazoo  
R. W. Shook, M.D., 611 American National Bank  
Bldg., Kalamazoo  
R. J. Armstrong, M.D., 605 Hanselman Bldg., Kala-  
mazoo  
J. V. Fopeano, M.D., 1210 American National Bank  
Bldg., Kalamazoo  
H. A. Machin, M.D., 420 John, Kalamazoo  
N. L. DeWitt, M.D., 808 Hanselman Bldg., Kalamazoo

**Kent**

Andrew Van Solkema, M.D., 953 E. Fulton, Grand  
Rapids  
L. C. Carpenter, M.D., Metz Bldg., Grand Rapids  
G. W. DeBoer, M.D., Medical Arts Bldg., Grand  
Rapids  
A. V. Wenger, M.D., 302 Lorraine Bldg., Grand Rapids  
W. B. Mitchell, M.D., 510 Medical Arts Bldg., Grand  
Rapids  
J. W. Logie, M.D., Metz Bldg., Grand Rapids  
Torrance Reed, M.D., Ashton Bldg., Grand Rapids  
W. R. Torgerson, M.D., Metz Bldg., Grand Rapids  
S. L. Moleski, M.D., Medical Arts Bldg., Grand Rapids  
C. E. Farber, M.D., Metz Bldg., Grand Rapids  
L. O. Grant, M.D., Medical Arts Bldg., Grand Rapids  
R. S. Van Bree, M.D., Loraine Bldg., Grand Rapids

**Lapeer**

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H. B. Zemmer, M.D., Lapeer

**Lenawee**

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C. H. Heffron, M.D., Adrian

**Livingston**

H. G. Huntington, M.D., Howell  
R. W. Lieber, M.D., Howell

**Luce**

F. R. Koss, M.D., Newberry  
M. A. Surrell, M.D., Newberry

**Macomb**

D. B. Wiley, M.D., Utica  
R. F. Salot, M.D., 713 Monitor Leader Bldg., Mt.  
Clemens

**Manistee**

E. B. Miller, M.D., Manistee  
J. F. Konopa, M.D., Manistee

**Marquette-Alger**

N. J. McCann, M.D., Marquette  
Moses Cooperstock, M.D., Marquette

**Mason**

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R. R. Scott, M.D., Scottville

**Mecosta-Osceola-Lake**

T. P. Treynor, M.D., Reed City  
Paul Ivkovich, M.D., Reed City

**Medical Society of North Central Counties**

(Otsego - Montmorency - Crawford - Oscoda - Ros-  
common - Ogemaw - Gladwin - Kalkaska)  
C. G. Clippert, M.D., 308 Michigan Ave., Brayling  
S. A. Stealy, M.D., Box 485, Grayling

**Menominee**

J. R. Heidenreich, M.D., Daggett  
H. R. Brukart, M.D., Menominee

**Midland**

R. S. Ballmer, M.D., Midland  
Charles MacCallum, M.D., Midland

**Monroe**

T. A. McDonald, M.D., 7 E. Front, Monroe  
J. P. Flanders, M.D., 31 Washington, Monroe

**Muskegon**

R. D. Risk, M.D., Muskegon  
T. J. Kane, M.D., 179 Strong Ave., Muskegon  
Louis LeFeuvre, M.D., 289 W. Wester, Muskegon  
D. R. Boyd, M.D., 1735 Peck, Muskegon

**Newaygo**

B. L. Masters, M.D., Fremont  
T. R. Deur, M.D., Grant

**Northern Michigan**

(Antrim-Charlevoix-Emmet-Cheboygan)  
J. R. Rodger, M.D., Bellaire  
L. E. Grate, M.D., Charlevoix

**Oakland**

P. E. Sutton, M.D., 617 Washington Square Bldg.,  
Royal Oak  
H. A. Furlong, M.D., 932 Riker Bldg., Pontiac  
C. R. Gatley, M.D., Route 3, Pontiac  
R. H. Baker, M.D., 1110 Peoples Bank Bldg., Pontiac  
J. D. Green, M.D., 311 Wabek Bank Bldg., Birming-  
ham  
F. J. Kemp, M.D., 1115 Peoples State Bank Bldg.,  
Pontiac  
O. R. MacKenzie, M.D., 128 Common, Walled Lake  
J. M. Markley, M.D., 1026 Riker Bldg., Pontiac

**Oceana**

W. H. Heard, M.D., Pentwater  
W. G. Robinson, M.D., Hart

**Ontonagon**

W. F. Strong, M.D., Ontonagon  
S. H. Rubinfeld, M.D., Ontonagon

**Ottawa**

D. C. Bloemendaal, M.D., Zeeland  
K. N. Wells, M.D., Spring Lake

**Saginaw**

C. E. Toshach, M.D., 330 So. Jefferson Ave., Saginaw  
H. D. Helmkamp, M.D., 2nd Nat. Bk. Bldg., Saginaw  
H. M. Bishop, M.D., 515 So. Jefferson, Saginaw  
W. K. Slack, M.D., 308 Eddy Bldg., Saginaw

**Sanilac**

R. K. Hart, M.D., Croswell  
Frank Ruhl, M.D., Croswell

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C. L. Weston, M.D., Owosso  
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Edwin Terwilliger, M.D., South Haven

**Washtenaw**

O. K. Engelke, M.D., Washtenaw County Health Department, Ann Arbor  
R. W. Teed, M.D., 215 S. Main, Ann Arbor  
P. S. Barker, M.D., University Hospital, Ann Arbor  
B. M. Harris, M.D., Ypsilanti  
H. H. Riecker, M.D., St. Joseph's Mercy Hospital, Ann Arbor  
R. I. Seime, M.D., 302 W. Cross, Ypsilanti  
H. A. Miller, M.D., 201 S. Ann Arbor Street, Saline  
A. M. Waldron, M.D., 9 Geddes Height, Ann Arbor

**Wayne**

J. J. Lightbody, M.D., 501 David Whitney Bldg., Detroit  
W. W. Babcock, M.D., 868 Fisher Bldg., Detroit  
C. J. Barone, M.D., 13535 Woodward Ave., Highland Park  
Arch Walls, M.D., 12065 Wyoming, Detroit  
R. L. Novy, M.D., 858 Fisher Bldg., Detroit  
Douglas Donald, M.D., 7815 E. Jefferson, Detroit  
C. L. Candler, M.D., 2006 David Broderick Tower, Detroit  
F. A. Weiser, M.D., Grace Hospital, Detroit  
G. C. Penberthy, M.D., 1515 David Whitney Bldg., Detroit  
W. D. Barrett, M.D., 311 David Whitney Bldg., Detroit  
E. D. Spalding, M.D., 320 Professional Bldg., Detroit  
T. K. Gruber, M.D., Wayne County General Hospital, Eloise  
E. C. Texter, M.D., 7457 Gratiot Ave., Detroit  
C. I. Owen, M.D., Grace Hospital, Detroit  
W. B. Cooksey, M.D., 62 W. Kirby, Detroit  
B. H. Douglas, M.D., 334 Bates, Detroit  
E. G. Krieg, M.D., 1842 David Whitney Bldg., Detroit  
D. C. Beaver, M.D., 432 E. Hancock, Detroit  
W. J. Cassidy, M.D., 1737 David Whitney Bldg., Detroit  
W. S. Reveno, M.D., 968 Fisher Bldg., Detroit  
C. D., Benson, M.D., 1515 David Whitney Bldg., Detroit  
M. A. Darling, M.D., 673 Fisher Bldg., Detroit  
G. T. McKean, M.D., 1515 David Whitney Bldg., Detroit

R. H. Pino, M.D., 208 David Whitney Bldg., Detroit  
H. F. Dibble, M.D., 1317 David Whitney Bldg., Detroit  
C. K. Hasley, M.D., 1429 David Whitney Bldg., Detroit

H. J. Kullman, M.D., Veterans Administration Hospital, Dearborn

D. H. Kaump, M.D., Providence Hospital, Detroit  
J. A. Kasper, M.D., Herman Keifer Hospital, Detroit  
H. B. Fenech, M.D., 10 Peterboro, Detroit  
L. W. Hull, M.D., 1701 David Whitney Bldg., Detroit

E. G. Bovill, M.D., 9203 Grand River, Detroit  
L. T. Henderson, M.D., 13038 E. Jefferson, Detroit  
J. E. Lofstrom, M.D., 410 Kales Bldg., Detroit  
R. A. Johnson, M.D., 7815 E. Jefferson, Detroit  
L. J. Morand, M.D., 641 David Whitney Bldg., Detroit

R. V. Walker, M.D., 1255 David Whitney Bldg., Detroit

L. J. Bailey, M.D., 10 Peterboro, Detroit  
E. H. Fenton, M.D., 15125 Grand River, Detroit  
R. L. Schneck, M.D., 641 David Whitney Bldg., Detroit

L. S. Fallis, M.D., Henry Ford Hospital, Detroit  
E. H. Lauppe, M.D., 1650 David Whitney Bldg., Detroit

R. F. Fenton, M.D., 15125 Grand River, Detroit  
W. L. Brosius, M.D., 1151 Taylor Ave., Detroit  
J. E. Croushore, M.D., 573 Fisher Bldg., Detroit  
E. D. King, M.D., 5455 W. Vernor, Detroit  
D. I. Sugar, M.D., 17 Brady, Detroit  
J. A. Witter, M.D., 344 Glendale, Detroit  
W. S. Carpenter, M.D., 1317 David Whitney Bldg., Detroit

L. R. Leader, M.D., 1139 David Whitney Bldg., Detroit

H. L. Morris, M.D., 1069 Fisher Bldg., Detroit  
J. R. Adams, M.D., 14741 Michigan, Dearborn  
K. M. McColl, M.D., 18520 E. Warren, Detroit  
A. V. Forrester, M.D., 18950 Woodward, Detroit  
Sidney Adler, M.D., 872 Fisher Bldg., Detroit  
E. C. Long, M.D., 2626 Rochester, Detroit  
W. P. Chester, M.D., 5057 Woodward Ave., Detroit  
S. M. Gillespie, M.D., 1011 Haigh, Dearborn  
H. F. Raynor, M.D., 1340 Maccabees Bldg., Detroit  
Mary M. Frazer, M.D., 812 Kales Bldg., Detroit  
J. K. Bell, M.D., 1654 National Bank Bldg., Detroit  
E. F. Dittmer, M.D., 14320 E. Jefferson, Detroit  
T. T. Callaghan, M.D., 10 Peterboro, Detroit  
V. N. Butler, M.D., 28 W. Adams, Detroit  
C. S. Ratigan, M.D., 22276 Garrison, Dearborn  
A. E. Schiller, M.D., 2010 David Broderick Tower, Detroit

E. J. Hammer, M.D., 16616 Mack, Detroit  
H. M. Nelson, M.D., 1067 Fisher Bldg., Detroit  
W. J. Yott, M.D., 15744 Harper, Detroit  
W. G. Bernard, M.D., 13002 E. Jefferson, Detroit  
L. J. Gravelle, M.D., 1101 David Whitney Bldg., Detroit

C. A. Coates, M.D., 21576 Michigan, Dearborn  
C. R. DeFever, M.D., 15124 Kercheval, Detroit  
C. R. Lam, M.D., Henry Ford Hospital, Detroit  
P. J. Waltz, M.D., 16127 Woodward, Highland Park  
L. J. Gariepy, M.D., 16401 Grand River, Detroit  
S. A. Zukowski, M.D., 6626 Van Dyke, Detroit  
H. A. Ott, M.D., 706 Maccabees Bldg., Detroit  
E. M. Vardon, M.D., 12897 Woodward, Detroit  
W. A. Chipman, M.D., 14920 Grand River, Detroit  
E. D. Maire, M.D., 15224 E. Jefferson, Detroit  
J. R. Brown, M.D., 702 Maccabees Bldg., Detroit  
E. L. Cooper, M.D., 414 David Whitney Bldg., Detroit  
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REFERENCE COMMITTEES, CREDENTIALS COMMITTEE, AND PRESS RELATIONS COMMITTEE  
HOUSE OF DELEGATES, 1949

(All meetings of Reference Committees will be held in the Pantlind Hotel, Grand Rapids:)

Credentials Committee

L. J. Bailey, M.D., Detroit, Chairman and Sergeant-at-Arms  
A. B. Gwinn, M.D., Hastings W. S. Stinson, M.D., Bay City

\* \* \*

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City E. B. Miller, M.D., Manistee  
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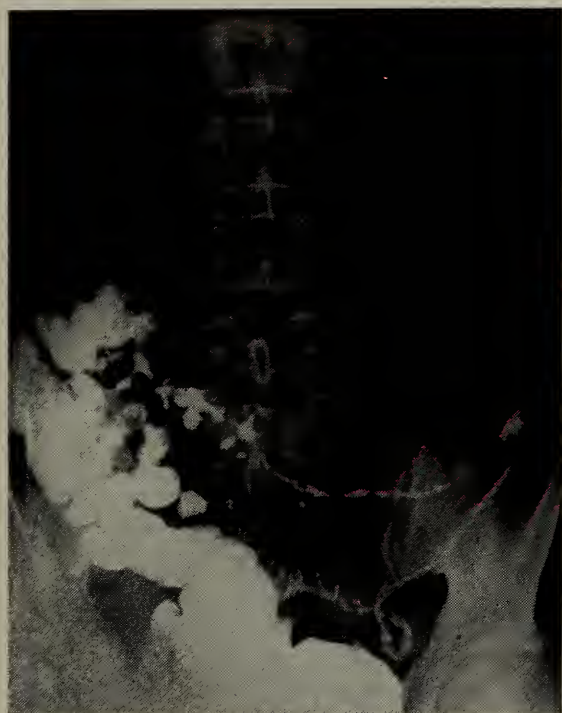
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# TREATMENT OF CONSTIPATION IN **mucous colitis**

*"The treatment of the constipation in mucous colic does not differ from the treatment of uncomplicated constipation. It is, as always, of great importance to avoid irritating aperients, . . . The stools should be rendered soft and more bulky and therefore more easy to expel with . . . and unirritating vegetable mucilages."*

—Hurst, A., in Portis, S. A.: *Diseases of the Digestive System*, ed. 2, Philadelphia, Lea & Febiger, 1944, p. 692.



**MUCOUS COLITIS.** In this x-ray is shown the distinctive string-like appearance of the descending portion of the lower bowel in mucous colitis, a condition frequently accompanying severe degrees of spastic or atonic colon. In the sagittal section is shown the over-secretion of mucus adhering to the bowel wall.



By providing soft, demulcent, water-retaining, mucilloid bulk, Metamucil—the "smoothage" treatment of constipation—promotes a return to normal elimination.



**METAMUCIL®** is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%), as a dispersing agent.

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# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## TO ARRANGE FOR CONTINUING IMMUNIZATION

To provide maximum protection of Michigan children against preventable disease, May was designated as Immunization and Child Health Month in the state, and co-ordinated effort of practicing physicians, health agencies, schools, parents and community groups was sought to set up local plans for continuing immunization of all children.

Governor G. Mennen Williams, in proclaiming the month, pointed out the importance of child health to the future of the state and called upon all parents to assure their own children's protection and to co-operate in assuring protection for all children in the community.

To help to secure the protection, the Michigan Department of Health developed and released the following basic immunization policies:

1. It is the responsibility of the local health department to see that children are immunized against preventable disease.

2. It is essential that this protection be given each child before his first birthday. The immunization of children under one year of age is a life-saving procedure.

3. It is also essential that the immunization of each child be boosted before the age of the three years, and again at five years, before entering school.

4. The private physician should be utilized to the fullest extent in both the primary protection and in the three-year booster treatments. This youngest age group does not adapt itself well to mass clinic procedures, and bringing these youngsters together is hazardous from the standpoint of contagion.

5. The preschool reimmunization of children (and the reimmunization or immunization of school children) is a joint responsibility of school and parent groups, health departments and private physicians.

6. Immunization should be available for those children whose parents are unable or unwilling to pay for it.

7. State and local health departments must carry on vigorous educational campaigns regarding immunization.

8. The local health department should take the responsibility for co-ordinating and developing a written plan for long-range continuing immunization against whooping cough, diphtheria, smallpox and tetanus for all the children within its jurisdiction, working co-operatively with the practicing physicians, the schools, parents and all local groups interested in child health.

9. The services of the staff of the Michigan Department of Health should be available wherever needed in education, in helping with the planning of the long-range program, or in arbitrating, when local groups cannot reach agreement upon a plan.

To carry out its share in the responsibilities, the Department devoted a series of six weekly radio broadcasts to subjects related to child and immunization. Dr. Albert E. Heustis spoke on the need for immunization; Dr. Goldie Corneliuson attempted to disprove certain "old wives tales" which hamper child health and immunization programs; Dr. Pearl Kendrick told of the need of whooping cough vaccination and other facts regarding the disease; Dr. Otto Engelke, director of the Washtenaw County Health Department, and Dr. F. S. Leeder discussed diphtheria prevention; Georgia Hood told of the importance of summer followup of school health services; and Mrs. Alice Smith talked on feeding the school child. Copies of these scripts were loaned for use elsewhere.

The Department sent out weekly news stories on immunization and child health to newspapers, press associations and radio stations of the state. It prepared and sent to each radio station of the state a series of "station breaks" or "spot" announcements for use during the month. It furnished material to the Michigan Congress of Parents and Teachers, the Department of Public Instruction, the Michigan Education Association JOURNAL and a group of educators from the State Grange for their use.

Each item of mail which left the Michigan Department of Health during May bore the meter stamp "Immunization Protects Your Child." The Department sends out approximately 50,000 items of metered mail on an average month. The figure for May was undoubtedly higher.

The Department revised "My Record of Immunization," and copies of the reviewed folder are sent with each notification of birth registration. Additional copies were made available to practicing physicians and parents through the local health departments.

The Department prepared and distributed to physicians of the state a fourth revision of "Recommended Immunization and Diagnostic Procedures for Physicians." It also prepared a brief outline of suggested "Immunization Schedules, 1949" and a small placard "A Message to Parents" signed by the Commissioner for use in the practicing physicians' offices. These items for physicians plus the Immunization Record form were sent to several thousands of practicing physicians along with an Immunization Month letter. Demands for additional copies from health departments, physicians, and individuals literally swamped the Department.

The laboratories of the Department held ample stocks of immunizing agents in readiness to meet the increasing demands brought about by the special emphasis of the month. Services of staff members of the Department were made available to any community of

*(Continued on Page 770)*

# Optimal Nutrition



## SO VITAL FOR OPTIMAL HEALTH

In the achievement and maintenance of optimal health, no other single influence looms so vital as sound nutrition. In fact, so important is this principle to preventive medicine that *optimal nutrition* has become the basis of all modern day health programs.

When nutritional health is threatened, as in dietary restrictions often imposed by disease, or during convalescence, or when the nutrient intake is insufficient because of other reasons, the *multiple dietary supplement* Ovaltine

in milk is especially useful for overcoming nutrient deficiencies of the diet.

Three glassfuls daily may readily supplement even poor diets to adequacy. Easy digestibility makes its many valuable nutrients—vitamins, minerals, biologically complete protein, and food energy—quickly available. The pleasing flavor adds to its wide applicability and usefulness.

The table below gives the amounts of nutrients in three glassfuls of Ovaltine in milk.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

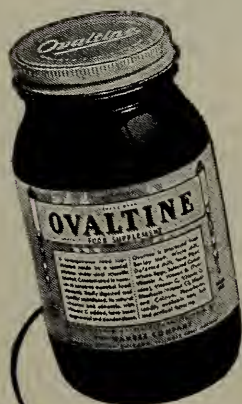
## Ovaltine

Three servings daily of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk,\* provide:

CALORIES	676	VITAMIN A	.3000 I.U.
PROTEIN	32 Gm.	VITAMIN B <sub>1</sub>	1.16 mg.
FAT	32 Gm.	RIBOFLAVIN	2.0 mg.
CARBOHYDRATE	65 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12 mg.	COPPER	0.5 mg.

\*Based on average reported values for milk.

Two kinds, Plain and Chocolate Flavored. Serving for serving, they are virtually identical in nutritional content.





# Controlled action in digestive disturbances

When pain, heartburn, belching, nausea, or unstable colon are due to gastrointestinal spasm, Mesopin provides an effective means for prompt relief. Its selective antispasmodic action on the digestive tract controls spasticity without the undesirable side effects of atropine or belladonna. Thus, symptomatic relief of many common disturbances of the stomach or intestines can be achieved with discrimination and safety. Supplied: Mesopin (2.5 mg. homatropine methyl bromide per tablet) available on prescription in bottles of 100 tablets.

## MESOPIN

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*Selective*

*Gastrointestinal Antispasmodic*

### THE G. A. INGRAM COMPANY

4444 Woodward Avenue      Detroit 1, Michigan

## ARRANGE FOR CONTINUING IMMUNIZATION

(Continued from Page 768)

the state for education, and for assistance in developing long-range immunization programs.

The Department sent one special and one regular issue of its Interdepartmental Circular, carrying information on the Immunization and Child Health Month purposes and activities and making suggestions for the local planning.

Local health departments were urged to plan and coordinate such activities in each community as might result in the development of a written and accepted long-range program of continuing immunization for all children in their jurisdictions.

They were advised to meet with the local medical society, plan co-operative programs with schools, parents, community groups and agencies, and to arrange for immunization month material to be read in all community meetings during May.

They were also urged to use every means possible to persuade parents of the importance of immunization in infancy and booster shots by age three and at age five. It was suggested that they have the mayor proclaim Immunization and Child Health Month; urge all organizations to devote programs to the subject during the Month; stimulate interest of newspapers and radio and provide them with copy; have each minister talk on immunization from his pulpit; send immunization materials by letters to interested groups and individuals; use immunization displays wherever possible, and use a rubber stamp on mail, advising immunization.

These activities and the co-operation of other agencies, it is hoped, will result in continued long-range immunization programs for the protection of children in many sections of the state.

## BLOOD PLASMA EMERGENCY

The American Red Cross has made its last shipment of free dried blood plasma from wartime surpluses to 200 hospitals in Michigan. In many cases this supply will be totally exhausted this month. Many hospitals in this state are facing a serious emergency.

This Department is mustering every resource to expand its plasma procurement program in order to be able to supply sufficient free plasma to meet the state's needs.

Whether free plasma is available in a local community now depends entirely on the co-operation of the community in the state free blood plasma procurement program. Unless there are sufficient donors in each community, the hospital patients in that community will have to purchase supplies from private or commercial sources. This also applies to gamma globulin for modification of measles and other fractions of blood. For some types of injury or illness the cost of plasma and fractions runs into thousands of dollars. Delay in finding donors with the right type of blood can prove fatal. The blood given in a local community is fractionated in the Lansing Laboratories and returned for use, without charge, in the donating community.

(Continued on Page 772)

# WHEN OBESITY IS A PROBLEM



**S. H. CAMP and COMPANY**  
JACKSON, MICHIGAN

*World's Largest Manufacturers  
of Scientific Supports*

Offices in New York • Chicago  
Windsor, Ontario • London, England

Clinicians have long noted that the forward bulk of the heavy abdomen with its fat-laden wall moves the center of gravity forward. As the patient tries to balance the load, the lumbar and cervical curves of the spine are increased, the head is carried forward and the shoulders become rounded. Often there is associated visceroptosis. Camp Supports have a long history among clinicians for their efficacy in supporting the pendulous abdomen. The highly specialized designs and the unique Camp system of controlled adjustment help steady the pelvis and hold the viscera upward and backward. There is no constriction of the abdomen, and effective support is given to the spine. Physicians may rely on the Camp-trained fitter for precise execution of all instructions.

If you do not have a copy of the Camp "Reference Book for Physicians and Surgeons", it will be sent on request.



THIS EMBLEM is displayed only by reliable merchants in your community. Camp Scientific Supports are never sold by door-to-door canvassers. Prices are based on intrinsic value. Regular technical and ethical training of Camp fitters insures precise and conscientious attention to your recommendations.





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every man's  
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**WHALING'S**

MEN'S WEAR • 617 WOODWARD

DETROIT 26 • MICHIGAN

## BLOOD PLASMA EMERGENCY

(Continued from Page 770)

Local Red Cross chapters throughout the state are now mobilizing donors for clinics which the Department will operate. Local medical societies are co-operating.]

The co-operation of local medical societies in publicizing the seriousness of the emergency, and in recruitment of donors, is urged at this time.

## DANGER IN SHOE-FITTING MACHINES

Indiscriminate and too frequent use of fluoroscopic shoe-fitting machines is dangerous to health of the shoe store employe and customer alike, the Michigan Department of Health has warned the public.

No individual should have fluoroscopic fittings more than twelve times a year, and each exposure should be limited to five seconds.

Fluoroscopic shoe-fitting machines should not be used as playthings, nor be operated by customers.

The Division of Industrial Health has investigated the potential hazards of fluoroscopic shoe-fitting machines and is now in the process of checking all the machines in use in the state.

Some machines, particularly of the older type which are not properly shielded emit or leak stray radiation into the area around them. This is particularly hazardous for employes who are exposed to the rays eight hours a day. Older machines are the most apt to be faulty. The Division hopes to check these machines first. To protect the health of their employes and their customers, owners of these older machines should immediately request the services of the Division of Industrial Health.

## INCIDENCE OF CERTAIN REPORTABLE DISEASES

Disease	April 1949	April 1948
Diphtheria .....	4	4
Gonorrhea .....	636	658
Lobar pneumonia .....	141	80
Measles .....	3,019	6,484
Meningococcic meningitis .....	14	14
*Pertussis .....	112	285
Poliomyelitis .....	3	6
Rheumatic fever .....	89	73
Scarlet fever .....	1,473	604
Syphilis .....	710	973
Tuberculosis .....	400	628
Typhoid fever .....	3	4
Undulant fever .....	26	23
Smallpox .....	0	0

## VENEREAL DISEASE IN HIGH SCHOOL

An article discussing the incidence of venereal disease among Michigan high school pupils, written by Dr. John A. Cowan, director of the Division of Tuberculosis and Venereal Disease Control, appears in the April issue of the *Journal of the Michigan Education Association*. The article is entitled "VD Invades the Classroom."

(Continued on Page 776)



## Soft-diet patients down in the mouth?

### Perk up appetites with Swift's Strained Meats!



#### 6 varieties:

Beef, lamb, pork,  
veal, liver, heart

Simply putting soft foods on a tray is no assurance that patients will put them away. That's why so many physicians today are recommending Swift's Strained Meats—flavorful, real meats they're sure patients will eat! Prepared specially, soft and smooth, Swift's Strained Meats are so good they tempt even the most apathetic appetites!

Nutritionally, Swift's Strained Meats are an excellent base for a high-protein, low-residue diet. They're highly digestible—easy to eat. Rich in biologically

valuable proteins, they make available simultaneously all known essential amino acids—for optimum protein synthesis. Further, Swift's Strained Meats supply hemapoeitic iron and goodly amounts of natural B vitamins. Let protein-rich Swift's Strained Meats put palatability in menus for your soft-diet patients!

To vary patient's menus, six different Swift's Strained Meats: beef, lamb, pork, veal, liver, heart. Convenient—ready to heat and serve!

The makers of Swift's Strained Meats invite you to send for the new physicians' handbook of protein feeding, written by a doctor, "The Importance of Protein Foods in Health and Disease." Send to:

## SWIFT & COMPANY

Chicago 9, Illinois



All nutritional statements made in this advertisement are accepted by the Council on Foods and Nutrition of the American Medical Association.



For patients who can take foods of less fine consistency—Swift's Diced Meats offer tender morsels of nutritious meats with tempting flavors patients appreciate.





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SPINAL BRACES  
ARTIFICIAL LIMBS  
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**TEMPLE 1-5103**

**DETROIT 1, MICH.**

## Communications

E. F. Sladek, M.D., President,  
Michigan State Medical Society,  
Lansing 8, Michigan.

Dear Dr. Sladek:

Dr. L. Fernald Foster, secretary of the Michigan State Medical Society, has written me that the Society has made me the recipient of an Award. This has just been forwarded to me by my son, Dr. Frederick Collier.

I am very proud to receive it and appreciate deeply the honor shown me. Will you, as president, please express to the members of the Medical Society my sincere appreciation and thank them for showing me this distinction?

Thank you for your personal congratulations and kind wishes.

With kindest regards, I am,

Sincerely yours,

GRANVILLE J. COLLIER, M.D.

May 11, 1948

Wilfrid Haughey, M.D.

Editor, MICHIGAN STATE MEDICAL SOCIETY JOURNAL  
Battle Creek, Michigan

Dear Doctor Haughey:

In September, 1948, the House of Delegates of the Michigan State Medical Society introduced a resolution relative to the creation of a medical library service. This resolution appears in the MICHIGAN STATE MEDICAL JOURNAL for November, 1948, page 1270. It would appear that some of the doctors in the state are not familiar with the present arrangement for loan of books, periodicals, and journals. I am, therefore, sending this letter to you in the hope that the following information may become familiar to all the doctors through publication in the JOURNAL of the Society.

The library of the University of Michigan through an inter-library loan service has available for use by any doctor in the state over 80,000 books and 800 journals and periodicals. Five separate books, periodicals or journal-volumes may be obtained at any one time. Additional loans may be made as the originals are returned. Requests are filled and sent by parcel post or express within twenty-four hours of receipt of inquiry. The expense of transportation is assumed by the lender.

To procure references it is suggested that the physician contact the home library, which in turn will obtain the books through inter-library loan service. If, however, a general library is not available, requests may be made by letter or telephone to the University of Michigan Medical Library, Ann Arbor, Michigan. Duplicate copies of current medical journals are available, and if the demand justifies, an attempt will be made to obtain

(Continued on Page 776)

# Specific Hyposensitization in Pollinosis

## PRESEASONAL TREATMENT

**75 to 85%** successful  
*in securing comfort and relief*

Order your choice of Arlington's  
Pollen Diagnostic and Treatment  
Sets now . . . and have ample time to  
complete your treatment schedules.

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THE ARLINGTON CHEMICAL COMPANY  
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### DIAGNOSTIC AND TREATMENT SETS

#### State Pollen Diagnostic Sets (\$7.50)

Dry pollen allergens selected according to state; 1 vial house-dust allergen. Material for 30 tests in each vial.

#### Stock Treatment Sets (\$7.50)

Each consisting of a series of dilutions of pollen extracts for hyposensitization, with accompanying dosage schedule. Single pollen or a choice of 21 different mixtures. Five 3-cc. vials in each set—1:10,000, 1:5,000, 1:1,000, 1:500, and 1:100 concentrations.

#### Special Mixture Treatment Sets (\$10.00)

Mixtures of pollen extracts specially prepared according to the patient's individual sensitivities. Ten days' processing time required.

Arlington offers a full line of potent, carefully prepared, and properly preserved allergenic extracts for diagnosis and treatment—pollens, foods, epidermals, fungi, and incidentals.

*Literature to physicians on request.*

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plus style-correctness. Scores of professional men visit us  
for cool clothing . . . secure in the knowledge that what  
they get will be right in every way!*

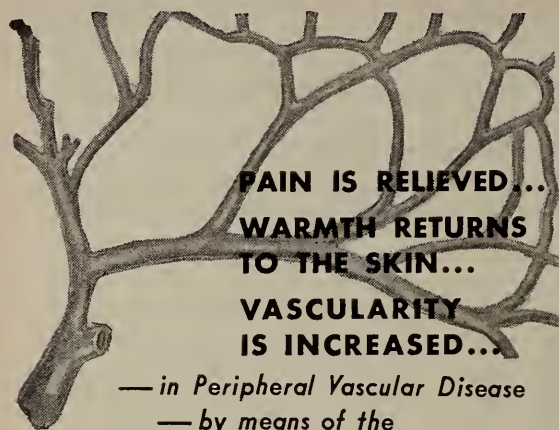
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## BURDICK RHYTHMIC CONSTRICTOR

The Rhythmic Constrictor automatically increases and relaxes pressure within a pneumatic cuff applied around the diseased extremity—providing increased blood flow with resultant symptomatic improvement.

The Burdick Rhythmic Constrictor is safe . . . convenient . . . quiet . . . painless.



### INDICATIONS:

Arteriosclerosis - Diabetic ulcers and gangrene - Acute vascular occlusion - Early thromboangiitis obliterans - Intermittent claudication - Chilblains.



Write to Dept. 1, Burdick Corporation, Milton, Wisconsin, for clinical information.

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THE BURDICK CORPORATION

**THE G. A. INGRAM COMPANY**

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(Continued from Page 774)

additional copies, thus assuring reasonable fulfillment of any journal request. During the past year about 300 doctors outside of Ann Arbor obtained 1,100 volumes through this service.

The Department of Postgraduate Medicine, through its office in room 2040, University Hospital, Ann Arbor, is available for any additional help in obtaining reference material.

Sincerely yours,  
H. H. CUMMINGS, M.D.

## MICHIGAN'S DEPARTMENT OF HEALTH

(Continued from Page 772)

### NEW MANUAL ON PREMATURES

A copy of the new book, "Premature Infants," written by Ethel C. Dunham, M.D., international authority in the field of prematurity, has been sent to each local health department in the state. Physicians who wish to inspect the book may see it in the department. Physicians may buy copies from the Superintendent of Documents, United States Government Printing Office, Washington, D. C., for \$1.25 each.

### TUBERCULOSIS DEATH RATE TO DROP

Provisional figures indicate a drop in the Michigan tuberculosis death rate for 1948. There were 1,643 deaths from all forms of tuberculosis in 1947. This represents a rate of 27.07 per 100,000 population. Figures for 1948 show 1,560 deaths from tuberculosis, or a rate of 25.18.

### SOCIAL HYGIENE FILM AVAILABLE FOR SUMMER

"The Miracle of Living," a thirty-nine-minute, 16 mm., sound, army training film on venereal disease is available from the Film Loan Library of the Department until September 1. The film, dramatic entertainment suitable for showing to the general public, emphasizes the need to protect the family from venereal disease and shows the effects of syphilis and gonorrhea on young people and its result in broken homes.

### STAFF MEMBERS ELECTED

John Hepler, director of the Division of Engineering, has been named secretary of the Michigan Engineering Society.

Dr. K. E. Markuson, director of the Division of Industrial Health, has been named chairman of the American Conference of Governmental Industrial Hygienists and president of the Michigan Association of Industrial Physicians and Surgeons.



## North Shore Health Resort Winnetka, Illinois

*on the Shores of  
Lake Michigan*

A completely equipped sanitarium for the care of  
nervous and mental disorders, alcoholism and drug addiction  
offering all forms of treatment, including electric shock.

**SAMUEL LIEBMAN, M.S., M.D.**

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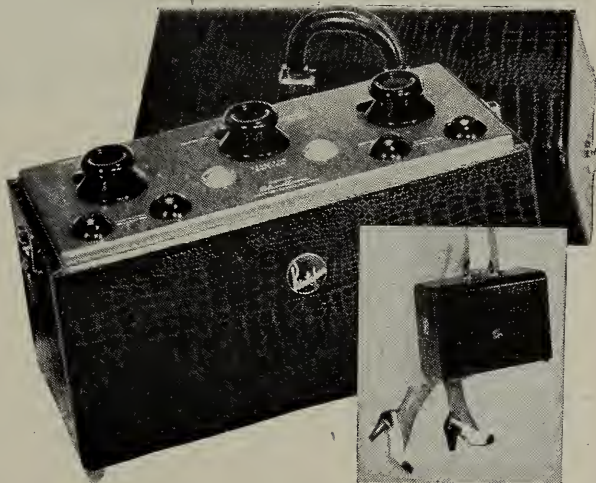
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## NEWS MEDICAL

*Michigan Authors.*—Darrell A. Campbell, M.D., Eloise, Michigan, published a paper in *Annals of Surgery*, March, 1949: "Resection of the Sternum for Metastatic Carcinoma."

Frans C. Lutman, M.D., Philadelphia, Pennsylvania, and James V. Neel, Ph.D., Ann Arbor, Michigan, published a paper in *Archives of Ophthalmology*, March, 1949: "Inheritance of Arachnodactyly, Ectopia Lentis and Other Congenital Anomalies (Marfan's Syndrome) in the E. Family."

W. J. Nungester, M.D., R. L. Thirlby, M.D., and A. B. Vial, M.D., Ann Arbor, Michigan, published a paper in *Surgery, Gynecology and Obstetrics*, May, 1949: "Evaluation of Hexachlorophene and Detergents as Substitutes for the Surgical Scrub; a Biological Technique."

Darrell A. Campbell, M.D., Eloise, Michigan, and Bert Bradford, Jr., M.D., Charleston, W.Va., published a paper, "Actinomycosis of the Thorax and Abdomen," August, 1948, in *Archives of Surgery*.

\* \* \*

Henry K. Fansom, M.D., Ann Arbor, Michigan, was one of the guest speakers of the Kansas Medical Society in Topeka, Kansas, May 10, 1949—subject: "Inflammatory Lesions of the Intestines."

\* \* \*

*Saginaw Valley Academy.*—Thirty eye, ear, nose and throat doctors attended a dinner meeting of the Saginaw Valley Academy of Ophthalmology and Otolaryngology at the Elk's Club, April 12, 1949.

Dr. J. Conrad Gemeroy, Detroit, gave an illustrated talk on external eye diseases. Dr. Harold H. Hiscock, president of the Genesee County Medical Society, with Dr. Rudolph W. Streat, welcomed members to their first meeting in Flint.

\* \* \*

*Certificates Ready for Former Flight Surgeons.*—Certificates are now ready for mailing to former medical officers who served during the war with the designation as flight surgeons.

The certificates, which are suitable for framing, indicate that the officer concerned was graduated from the Aviation Medical Examiner's Course given at the U. S. Air Force School of Aviation Medicine, Randolph Air Force Base, Texas. Those who are eligible to receive the certificates may secure them by writing direct to the Air Surgeon, Headquarters, U. S. Air Force, Washington 25, D. C. Officers now on active duty are not eligible to receive the certificates.

*International Academy of Proctology.*—The first meeting of the newly formed International Academy of Proctology was held at the Marlborough-Blenheim in Atlantic City, N. J., on Friday, June 10, 1949.

The scientific portion of the program consisted of the presentation of papers and motion picture films of interest to all physicians as well as to those specializing in proctology.

\* \* \*

*Air Surgeon Initiates General Practice Branch.*—Air Surgeon Major General Malcolm C. Grow has announced the initiation of a General Practice Branch in the Air Surgeon's office, to be charged with the development of training opportunities and careers for general practitioners serving at USAF installations.

According to current Air Force organization, approximately 70 per cent of physicians serving with USAF units are general practitioners. Of the remainder, 5 per cent are staff and administrative personnel and 25 per cent are specialists.

Initiation of the new General Practice Branch was considered imperative by General Grow who characterized the general practitioner as "the backbone of the Air Force medical service."

Under the new program the general practitioner will be enabled to enter into a proposed residency program to be operated in the General Hospital setup. The residency program will offer the general practitioner access to latest technical developments in medical and surgical specialties. Special emphasis will be placed on internal medicine, surgical practices, pediatrics and obstetrics.

The new General Practice Branch will work cooperatively with the Surgeon General's career program for medical officers.

\* \* \*

*New York Plan Threatens to Top Michigan as Largest Blue Shield Plan.*—Reporting a net gain of better than 165,000 members during the first quarter of 1949, United Medical Service, New York, threatens to replace Michigan Medical Service as the largest Blue Shield Plan in the nation.

United Medical Service reached a total of 1,294,650 members on March 31, 1949, only a few thousand behind Michigan Medical Service with its 1,329,044 members as of the same date.

Although complete returns for the first quarter of 1949 have not been received by the Blue Shield na-

(Continued on Page 780)



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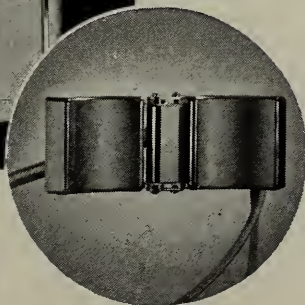
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(Continued from Page 778)

tional office, it is estimated that total membership in the nonprofit plans exceeded the 11,000,000 mark on March 31.

\* \* \*

Advertisers in our JOURNAL are carefully selected. Only those meeting our advertising standards may use the facilities of our pages. No advertisement will be accepted which, either by intent or inference, would result in misleading the reader. May we suggest that you review the ads in each issue of our JOURNAL and, when occasion arises to prescribe products featured or use of the facilities offered; tell them you saw their ad in the MSMS JOURNAL.

\* \* \*

*Michigan Authors.*—George R. Minor, M.D., Ann Arbor, Michigan, published a collective review, "Care of Patients with Surgical Diseases of the Chest," in *Surgery, Gynecology and Obstetrics* for March, 1948.

D. J. Leithauser, M.D., F.A.C.S., Detroit, Michigan, published an article, "Atypical Adynamic Ileus Apparently Caused by Nutritional (Thiamine Chloride) deficiency; Report of Six Cases," in *Surgery, Gynecology and Obstetrics* for May, 1948.

Max M. Peet, M.D., F.A.C.S., Ann Arbor, Michigan, Emil M. Isberg, M.D., Miami Beach, Florida, and Robert C. Bassett, M.D., Ann Arbor, Michigan, published an article, "Toxemia Superimposed upon Pre-pregnant Hypertension Treated by Splachnicectomy," in *Surgery, Gynecology and Obstetrics* for June, 1948.

\* \* \*

*Make a little notation* that seven industries are now "nationalized" in Britain. The latest one to become a function of the government is the gas (heating and lighting, not gasoline—which is called petrol, and not politics—which already is) industry. This transition was made with very little fanfare—proving that once the principle is established, it takes very little implementation to accomplish the change. And the June convention of the British Labor Party has as platform planks the "nationalization" of the insurance business and of all storage facilities. This is a good one for our insurance agents to mull over.—William Bromme, *Detroit Medical News*, May 16, 1949.

\* \* \*

"If we understand this government medical insurance plan, it goes like this: When this plan is in effect, you have a headache, for instance; so the government pays for curing your headache. Then when you get the tax bill for the medical insurance, you have a worse headache. This used to be known as a vicious circle before Washington changed the name.—*Grand Rapids Press*, May 5, 1949.

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**AMA Raises Standards of Graduate Medical Training.**—The American Medical Association announced on May 13, 1949, approval of a residency specifically designed to train *family doctors* and new requirements for approval of hospitals for intern training.

Previously the AMA Council on Medical Education and Hospitals had approved hospitals for general or mixed residencies, which were rather loosely organized training programs, for the purpose of providing additional experience following internship.

The residency for general practice will provide supervised training in the four major clinical divisions—internal medicine, surgery, obstetrics-gynecology, and pediatrics—as well as in the auxiliary services of anesthesiology, pathology, and radiology.

A total of 870 hospitals which the council had previously accredited for general residency training will be expected to reorganize their programs in accordance with the new requirements for the general practice residency. The American Medical Association emphasizes that the council's purpose is to encourage more young physicians to enter the field of general practice.

In the past doctors who did not intend to limit their work to a specialty have sought appointments to residencies in specialty fields because adequate facilities for a broader type of graduate training were not available, the editorial adds.

The council re-emphasized the importance of a well-organized program for intern training, stating that internships arranged merely to provide hospitals with resident

personnel to assist in the clinical work of the hospital cannot be approved. It believes that a well-organized internship of the rotating type, which provides training in the four major clinical divisions, is likely to provide the best basic training for both the future general practitioner and the future specialist.

While the majority of internships approved are now of one year's duration, the council recommended longer periods of service.

For the first time, the council suggested a method for determining the number of interns to be appointed. The bed capacity of the hospital is used as a basis, with a range of fifteen to twenty-five beds per intern recommended. Although the council does not establish a specific number of interns to be appointed by approved hospitals, the hospitals will, no doubt, comply with this suggestion in organizing their programs, the editorial says.

Estimates indicate that 1,380 hospitals can meet the present quantitative requirements set up by the Council on Medical Education and Hospitals and hence have the potential to develop a program which will meet standards for approval by the council, according to the editorial. The number now approved for intern training is 807.

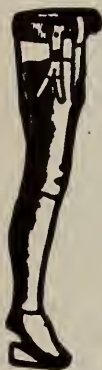
\* \* \*

**Saginaw Valley Academy of Ophthalmology and Otolaryngology.**—At the Annual meeting May 10, 1949, at the Bancroft Hotel in Saginaw, Dr. Louis Dill, Detroit, talked on various aspects of nasal diseases. Dr. V. E. Cortipassi, Saginaw, was named president, and Dr. Wm.



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Hubbard, Flint, was named president-elect. Dr. Andre Cortipassi was re-elected secretary-treasurer.

\* \* \*

*Record Vote on Resolution Against Socialized Medicine.*—The following is the recorded vote of the members of the House of Representatives as they successfully adopted Senate Concurrent Resolution 19 which memorialized Congress not to pass legislation relative to socialized medicine. Scan this list to see how your local Representative(s) voted. *Congratulate them for a "yea" vote.*—If their vote was "nay" it indicates the need for them to be contacted with additional information on this important public question which should transcend party lines.

## Vote of Michigan Representatives

### Yeas

Acker	deBoom	Karel
Anderson	Decker	Kirk
Bannasch	Dickerson	Montgomery
Bauer	Engstrom	Morgan
Beardsley	Espie	Nelson
Benjamin	Estes	Peltz
Betz	Geerlings	Preston
Brigham	Graebner	Richards
Carroll	Haley	Schepers
Cavanagh	Hauffe	Storey
Christman	Hermann	Thomson
Cleary	Herrick	Van Valenburg
Conlin	Hoxie	Warner
Cramton	Hutchinson	Werner
Davidson	Johnston	Young, David E.
Deadman		Speaker

### Nays

Carey	Harrelson	O'Brien, Michael J.
Chase	Hebert	O'Brien, Thomas C.
Collins	Kelly	O'Connor
Currie	Kowalski	O'Malley
Dingman	Lindsay	Penczak
Doll	MacKay	Ptaszkiewicz
Doyle, Leo J.	Mahoney	Rathke
Doyle, Patrick J.	McMahon	Sibley
Edwards, Miss	Morrison	Trombley
Fitzpatrick	Nill	Valenti
Fuller	Novak, Michael	Wilk
Griffiths, Mrs.		Zanglin

### Members Present and Not Voting

Cooper	Novak, Stanley	Post
Kruse	Phillips	Robinson

\* \* \*

*Charles W. Buggs, M.D.*, who has been associated with the Wayne University College of Medicine since October, 1943, has become chairman of the Division of the Sciences and professor of biology at Dillard University in New Orleans, Louisiana. He will also serve as consultant in pre-medical education to a group of Negro institutions of higher learning. Dr. Buggs taught at Dillard for eight years before coming to Wayne University. While at Wayne, he has been associated with a number of research projects—notably, one on contaminated wounds and another on new penicillin preparations. His resignation from Wayne was effective April 9, 1949.

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**Maternal Death Rate.**—Final tabulation of births and maternal deaths for 1947 by the National Office of Vital Statistics indicates a new record low maternal mortality rate of 1.3 per thousand live births. In 1933 the American rate of 6.2 placed this country eleventh among the leading nations. Since then the drop to 1.3, amounting to a 79 per cent reduction, has undoubtedly raised the rank of the United States to first place or close to first place. And this under our outmoded, inadequate system of health care!

\* \* \*

**Official Statement of the Board of Trustees of the National Physicians Committee for the Extension of Medical Service.**—Ten years ago, a group of officers and fellows of the American Medical Association realized that the American Medical Association was not as active in certain functions as was deemed necessary, some of which seemed at that time inappropriate for the American Medical Association to perform. As a result, the National Physicians Committee for the Extension of Medical Service was created and has worked during these intervening years within the policies established by the House of Delegates of the American Medical Association.

Several times during those years, the House of Delegates has expressed confidence in the work of this organization.

Two years ago, a Committee of the House of Delegates reported that "the American Medical Association should and must do its own public relations work."

In December, 1948, the House of Delegates took action to create a new agency to carry on public relations activities and to further the extension of medical care. This new agency has been created and is functioning. The program as planned and now being carried on by the American Medical Association represents the fulfillment of the objectives for which the National Physicians Committee was created and toward which it has been working.

Its aims having been accomplished, the Board of Trustees of the National Physicians Committee met in Chicago on April 10, 1949, and voted (1) to approve the action of its Management Committee in authorizing cessation of all activities, as of April 1, 1949, and (2) to liquidate the affairs of the National Physicians Committee in an orderly manner.

It planned further to hold its next meeting in Atlantic City in June, 1949, and at that time to consider further action looking toward dissolution of the organization.

During its ten years of activity, the National Physicians Committee has brought about the formation of forty-seven state committees of physicians and forty-six state committees of dentists, in addition to other local organizations, that have functioned vigorously and well. The Board of Trustees now suggests to the physicians making up the personnel of these state committees that they offer their services to the new American Medical Association agency.—EDWARD H. CAREY, M.D., *Chairman*, N.P.C. Board of Trustees.





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*Orchids for MSMS:* M. A. Perlstein, M.D., Chicago, who recently conducted several cerebral palsy clinics throughout Michigan, writes: "The JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY is one of the best state medical journals that I have seen."

Dean Burns, M.D., Petoskey, Michigan, writes: "At a recent course of study at Bellevue Postgraduate in New York, I took great pleasure in hearing of the esteem in which the Michigan State Medical Society is held and of the respect with which its various pioneer activities are regarded, both in the postgraduate work it offers its members and in its approach to the economic problems of medicine. All of us realize that the major credit for the Society's outstanding reputation beyond the borders of the state must be given to its recent officers who have contributed so freely of their time and thought in the development of its program."

\* \* \*

J. S. DeTar, M.D., Milan, Speaker of the MSMS House of Delegates, spoke to the Saginaw County Medical Society on May 17 in Saginaw. His subject was "What Everyone Should Know About Socialized Medicine." The meeting was well attended by laymen.

\* \* \*

Three hundred and seven was the total registration at the May 5 Ingham County Medical Society Clinic at the Olds Hotel, Lansing. The program included scientific talks by Donald R. Nichols, M.D., Rochester, N. Y.; Willard O. Thompson, M.D., Chicago; Priscilla White, M.D., Boston, and James J. Callahan, M.D., Chicago.

Elmer F. Hess, M.D., Erie, Pennsylvania, gave the dinner talk on "A Report from the Washington Scene."

\* \* \*

Hugh W. Brenneman, Lansing, Public Relations Counsel for the Michigan State Medical Society, addressed the Medical Society Executives Conference in Atlantic City on June 8. His subject was "Co-ordinating the Work of State and County Medical Societies in Public Relations Activity."

Clem Whitaker and Leone Baxter, Public Relations Counsel for the AMA, spoke on "Status of the AMA Campaign."

\* \* \*

*Life Magazine* of May 2, 1949, presented an illuminating editorial "Health by Compulsion" on Pages 40 and 41. The subtitle of this excellent analysis of the aims of the administration vs. that of the medical profession read "The President proposes much that is good, but there are better ways to achieve his goal."

Every doctor of medicine should read *Life's* editorial of May 2, which ends: "It is not the money, however, nor any threat of 'socialization,' that in the last analysis bothers *Life*. What worries us is the loss of moral power that must come when a people turns more and more to compulsion to solve its problems. Left to their own devices, the U. S. people have shown both ingenuity and ability in meeting their needs through voluntary action. Without state compulsion they have created the best medicine in the world. What is more, they have demonstrated that American capitalism can shape the social instruments necessary to a modern



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society without relinquishing the freedom and responsibilities that make it strong."

\* \* \*

"*Medicine and Politics Don't Mix*" is the title of an excellent editorial which appeared in *Collier's* May 14. This editorial says in part: "We think we shall get along faster and better if the advocates of better medical care for more people get this lurking desire for socialistic experimentation out of their heads. Some of it is there now to confuse the issue."

"We think it would be very wise for Congress to create a truly competent and unpolitical commission with which the doctors could in dignity co-operate. Out of such a group, comparable to the British Royal Commission, a truly statesman-like plan might evolve."

\* \* \*

"*Medicine Man*" is the title of a report on socialized medicine in Great Britain, printed in *Time Magazine* of March 21, 1949. Five pages are devoted to this survey, including a lengthy biographical sketch of the champion of socialized medicine, Anuerin Bevan, Minister of Health, who "held arrogant and undisputed possession of the field when Churchill walked out of the house," according to *Time*.

\* \* \*

Lillian R. Smith, M.D., former director of the Bureau of Maternal and Child Health of the Michigan Department of Health, died at her home in Harwich, Cape Cod, Mass., on April 13. She retired from the Michigan Department of Health on June 30, 1946, after twenty-two years' service.

The proportion of deaths from tuberculosis among people over forty-five years of age is steadily increasing.—Robert J. Anderson, M.D., *Pub. Health Rep.*, April 1, 1949.

\* \* \*

Harry L. Clark, M.D., who has served Wayne University College of Medicine for almost forty years, has been appointed professor emeritus of bacteriology and clinical pathology.

\* \* \*

*Action on Bills.*—H.R.4384, providing for the appointment of female doctors and specialists in the Medical Department of the Army, on June 6 was passed by the House of Representatives and sent to the Senate.

H.R.4567, displaced persons bill, passed the House of Representatives on June 2.

S.458, providing for a survey of physically handicapped citizens, was reported by the Senate Committee on Post Office and Civil Service with minor amendments on June 2.

\* \* \*

The National Committee for Chile is now receiving gifts for the library of the medical school of the University of Chile at its new collection center in the Library of Congress, Washington. The newer materials in the library, including periodicals, books and reference materials, were totally destroyed in the recent fire. Medical periodicals of the last ten years and recent medical books are urgently needed. Your contribution will be appreciated. National Committee for Chile, Room 318, Library of Congress, Washington, D. C.



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Surgical Anatomy and Clinical Surgery, Two Weeks, starting June 20, July 25, August 22.  
Surgery of Colon and Rectum, One Week, starting June 13, September 12.  
Esophageal Surgery, One Week, starting October 10.  
Thoracic Surgery, One Week, starting June 20.  
Breast and Thyroid Surgery, One Week, starting June 27.  
Fractures and Traumatic Surgery, Two Weeks, starting June 13.
- GYNECOLOGY**—Intensive Course, Two Weeks, starting June 20, September 26.  
Vaginal Approach to Pelvic Surgery, One Week, starting June 13, September 19.
- OBSTETRICS**—Intensive Course, Two Weeks, starting September 12.
- MEDICINE**—Intensive General Course, Two Weeks, starting June 13.  
Gastroenterology, Two Weeks, starting June 27.  
Gastroscopy, Two Weeks, starting June 13, July 18.  
Electrocardiography and Heart Disease, Two Weeks, starting July 18.
- PEDIATRICS**—Diagnosis and Treatment of Congenital Malformations of the Heart, Two Weeks, starting June 13.  
Personal Course in Cerebral Palsy, Two Weeks, starting August 1.
- DERMATOLOGY**—Formal Course, Two Weeks, starting June 13. Informal Clinical Course every two weeks.
- UROLOGY**—Intensive Course, Two Weeks, starting September 26. Ten Day Practical Course in Cystoscopy every two weeks.

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United States Senator Butler of Nebraska recently conducted a poll of 1,000 businessmen throughout the nation. This survey showed that these men are overwhelmingly opposed to the administration's compulsory health insurance proposal, Senator Butler said.

While 47 per cent favored and 53 per cent opposed extension of old age and unemployment benefits, 94 per cent opposed compulsory health insurance.

\* \* \*

A Swindle.—“Socialized medicine in Britain is a swindle, because we have not sufficient doctors, nurses, or hospitals to service the plan. One-ninth of the hospital beds are vacant because of lack of doctors and nurses.”

“A crippled society (in England) is walking about on the crutches of capitalism. We are strengthening the weak by weakening the strong.”—Cecil Palmer of England, in his famous address, “What Socialism is Doing to British Freedom.”

\* \* \*

“In Tribute to the American Doctor” is beautifully portrayed in the Philip Morris spread on pages 664 and 665 of this issue. Philip Morris invites you to send for a copy suitable for framing. Display it in your reception room—your patients will enjoy reading it.”

\* \* \*

Past President Henry E. Perry, M.D., Newberry, is recovering from an automobile accident and can be reached by his many Michigan friends at the residence of his daughter, Mrs. Jean Langford, 907 Princeton Place, Lakeland, Florida.

\* \* \*

Wm. A. Hyland, M.D., Metz Building, Grand Rapids, as chairman of the Medical Advisory Committee of the American Cancer Society for Michigan, invites any doctor of medicine interested in cancer work to apply for fellowship grants from the Damon Runyon Memorial Fund, which is administered by the American Cancer Society. Applicants for the Fellowships can contact Dr. Hyland in Grand Rapids for this excellent opportunity.

\* \* \*

MSMS Secretary L. Fernald Foster, M.D., Bay City, presented the following talks, recently: Sebewaing Chamber of Commerce Meeting of March 28, “National Health Program”; Wayne County Medical Woman's Auxiliary, April 8, “Compulsory Health Insurance,” NBC network from Marinette, Wisconsin, on April 23, “Blue Cross and Blue Shield in Michigan.”

\* \* \*

An open forum on “Socialized Medicine” was held by the Kalamazoo Academy of Medicine at its April 19 meeting.

\* \* \*

The Bulletin of the Genesee County Medical Society, issue of April 26, was a special edition edited by the Woman's Auxiliary to the G.C.M.S. It proved to be an interesting release.

\* \* \*

Under New Business, the Executive Committee of the Ingham County Medical Society on April 5, 1949, adopted a motion urging “members of the Society to

prepare a motion withdrawing the former action of non-participation in Michigan Medical Service and as of this date that the Society urges its membership to become participating members in Michigan Medical Service."—From Ingham County Medical Society Bulletin, April, 1949.

\* \* \*

The Medical Film Institute has opened offices in the New York Academy of Medicine Building, 2 E. 103rd St., New York City, according to an announcement of Walter A. Bloedorn, M.D., dean of George Washington University School of Medicine and chairman of the Audio Visual Committee of the Association of American Medical Colleges. The Institute was set up for the purpose of fostering high standards in medical film production as regards to scientific content, educational value, and cinematic qualities.

\* \* \*

The National Society for Crippled Children and Adults will hold its convention November 7, 8 and 9, 1949, at the Commodore Hotel, New York, according to an announcement made from Chicago headquarters by Lawrence J. Linck, executive director. Delegates from 2,000 state and local affiliates of the National Society will discuss research, rehabilitation, training and treatment for the handicapped.

\* \* \*

#### ANNUAL COLLER-PENBERTHY CLINIC

The twenty-seventh annual Collier-Penberthy Clinic will be held in Traverse City on July 28-29, 1949, under the sponsorship of the Grand Traverse, Leelanau, Benzie County Medical Society.

This annual clinical teaching center has been constantly used by the Department of Postgraduate Medicine and the heads of the various departments of the University of Michigan Medical School as a testing group to institute and evaluate new ideas and techniques in extra-mural postgraduate medical teaching.

During the past two years a most successful development of a teaching program is the "Clinical Medical Conference" and the "Clinical Surgical Conference." Well-prepared patients are presented to a panel of experts, who request the history, examine and interrogate the patient, request laboratory and x-ray findings, and then discuss, out loud, amongst themselves the diagnostic and therapeutic problems. Audience participation in discussion follows, and the experts demonstrate diagnostic procedures. This ultra practical method of teaching the actively practicing physician has proven of great benefit, in that knowledge gained is associated with a definite patient, and thus memory is more retentive and useful for future use.

All doctors of medicine living or visiting in the Grand Traverse Region are invited to attend these two clinical days.

\* \* \*

An old Chinese saying: "He that thinketh by the inch and talketh by the yard should be kicketh by the foot."

\* \* \*

Socialistic England will exist as long as capitalistic America will let it.

\* \* \*

JUNE, 1949

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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**PRACTICAL ASPECTS OF THYROID DISEASE.** By George Crile, Jr., M.D., F.A.C.S., Department of Surgery, Cleveland Clinic. 355 pages with 101 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$6.00.

Since the turn of the century, the surgical treatment of goiter with the use of iodine has become a universally accepted course of action. Recently, the introduction of thiouracil has made a change and replaced the internist in the goiter field. Now many cases are being handled satisfactorily by the internist, with the radiologist. The prospect of radio-active iodine and its use is challenging. Dr. Crile gives a rather thorough, but small treatise on thyroid disease and its treatment, not neglecting the details of diagnosis, the exact operative procedures, the trials and dangers to be encountered. The disease is still a problem of the internist and other attendants, not just that of the surgeon. All must work together for the best results, and the outlook is encouraging for simpler methods. Many pictures, diagrams, and charts give invaluable information both for diagnosis and for selective treatment.

**HANDBOOK OF DISEASES OF THE SKIN.** By Richard L. Sutton, M.D., Emeritus Professor of Dermatology and Syphilology, University of Kansas Medical School; and Richard L. Sutton, Jr., M.D., Associate Professor of Dermatology and Syphilology, University of Kansas Medical School. With 1057 illustrations. St. Louis: C. V. Mosby Company, 1949. Price \$12.50.

This is a very complete and excellently illustrated book. The pictures are clear, instructive and profuse. The text is well selected, well printed, but it seems to have much small print. All descriptions are in smaller type, while the text and discussion are large and easily readable. The complete field of dermatology is covered. Frequent references are given for source of the information given. This handbook is concise and a valuable reference.

**SAFEGUARDING MOTHERHOOD.** By Sol T. DeLee, M.D., Clinical Instructor of Obstetrics and Gynecology, University of Illinois; Attending Obstetrician at the Chicago Maternity Center; Former Associate in Obstetrics and Gynecology, Cook County Hospital. 42 illustrations. Philadelphia: J. B. Lippincott Company, 1949. Price \$2.00.

This volume is written to inform the mother or expectant mother of the myriad things she should know. The information is exact, authentic, and seeks to answer the questions to be asked by the pregnant woman before they become a burden to the busy obstetrician. Dr. DeLee is seeking to forestall the many complications of



pregnancy which are due to ignorance or neglect. The expectant father also gets notice. A very handy book for the patient.

**BLOOD TRANSFUSIONS.** By Elmer L. DeGowin, M.D., Associate Professor of Internal Medicine, State University of Iowa; Robert C. Hardin, M.D., Assistant Professor of Medicine, State University of Iowa; and John B. Alsever, M.D., Senior Surgeon, U. S. Public Health Service. 587 pages with 200 diagrammatic drawings. Philadelphia and London: W. B. Saunders Company, 1949. Price \$9.00.

The authors of this text covered the field of transfusion, placing special emphasis on the use of whole blood. The subject matter used is discussed briefly, but clearly and to the point. There are no long discourses on any particular phase. The high lights are emphasized with sufficient description and clarity.

In the beginning chapters the choice of blood and substitutes are given. Following this, there is a brief discussion of shock and the methods of treatment are outlined. The discussion of the various blood groups and types is admirably well presented, so that the pertinent facts are brought out. The descriptions are further emphasized by diagrams and graphs.

The chapter on laboratory procedure is outstanding, especially from the technician's standpoint, who now assumes such an important role in blood transfusions. Over 100 pages are devoted to this phase. The descriptions of the procedures are supplemented step by step by schematic diagrams, so that the processes can be easily followed without long explanations and descriptions.

The last part of the book is devoted to several chapters on the preparation, preservation, storage and administration of blood and its derivatives.

This is an excellent publication and should be read by all clinicians who are interested in transfusions. The transfusionist, pathologist and the technician will all do well to have this work in their libraries.

G.W.S.

**OPERATING ROOM TECHNIQUE.** By Adythe Louise Alexander, R.N., Supervisor of the Operating Rooms of the Roosevelt Hospital, New York City; formerly Supervisor of Operating Rooms, Mountsinide Hospital, Montclair, N. J., Supervisor of Private Pavilion Operating Rooms, New York Hospital, New York City. With 668 illustrations. Second Edition. St. Louis: C. V. Mosby Company, 1949. Price \$10.00.

The illustrations give pictures of every type of operation, showing various stages of the procedure, also the special instruments. The text is well set in large type, and describes briefly the operative procedure or objective, and gives the stages of the surgery, the layout of instruments, and a list as well as a picture of the finished layout. There is a discussion of the anesthetic, the position of the patient, draping, and a list of the procedures in 1, 2, 3, 4, 5 order, with in opposite columns a schedule of the instruments to be used. There is also a complete list of instruments, numbers of each, sutures, needles, sterile and other supplies, and a schedule of procedures up to twenty that we found in one condition. This is very complete, and could simplify the nurses' work in preparing for surgery. The text is also most informative for the surgeon also, to review all the steps he will take in some unusual case. Valuable and sufficiently compact.

JUNE, 1949



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## HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of May 18, 1949

- Monthly financial reports and bills payable were presented, studied and approved.
- The vital need for more space for the Executive Offices was again discussed. Six possible locations in Lansing have been inspected by the special committee (Drs. E. F. Sladek, T. E. DeGurse, and L. Fernald Foster). The committee was instructed to continue its survey and to negotiate for the rental or option to purchase a suitable property.
- Committee reports were approved from the Legislative Committee, the Sub-committee on Program for the 1950 Michigan Postgraduate Clinical Institute, the Medical Advisory Committee to The National Foundation for Infantile Paralysis, Uniform Fee Schedule for Governmental Agencies Committee, Committee on Co-operation with Blue Cross-Blue Shield, and the Special Committee on Education.
- The Public Relations Counsel's monthly report was presented, including script for the new MSMS movie as well as the fact that more organizations in Michigan have adopted resolutions against socialization of medicine than in any other state.
- Michigan Delegates to the AMA were present at this session to discuss ten items for possible presentation to the AMA House of Delegates in June, 1949.
- The Sub-committee on Diabetes (of the MSMS Geriatrics Committee) was authorized to include a statement in the next Secretary's Letter to Michigan's County Medical Societies regarding the Diabetic Detection Drive next autumn.
- The General Counsel presented opinions (a) on legal status of partnership for the practice of medicine, and (b) on matter of patient's consent for records.
- The Michigan Foundation for Medical and Health Education, Inc. was authorized to issue postgraduate diplomas or certificates to Fellow and Associate Fellows who have completed the prescribed course of study as outlined by the MSMS Committee on Postgraduate Medical Education in co-operation with the medical schools of the University of Michigan and of Wayne University.
- Report on annual visit to U. S. Senators and Congressmen (as authorized by MSMS House of Delegates) was reported by the MSMS representatives who visited Washington May 2-3. The delegation was thanked for its efforts in establishing a fine relationship between MSMS and our law making friends in the national capitol.
- Councilor William S. Jones, M.D., of Menominee was given a vote of thanks for a splendid job in organizing a speaking tour throughout his 13th District in April; seven well-attended meetings, both public and medical, were addressed by President E. F. Sladek, M.D., and Secretary L. Fernald Foster, M.D.
- W. F. Strong, M.D., Ontonagon, was appointed chairman of the County Secretaries Conference of 1950.
- A Speakers Bureau Conference or public speaking "school" for doctors of medicine was authorized for September 22, in Grand Rapids, at the time of the MSMS Annual Session.
- A list of Past Speakers of the MSMS House of Delegates was authorized to be printed annually in the Handbook for Delegates.
- The Executive Committee of The Council, which convened at 11:00 a.m. adjourned after a full day at 9:10 p.m.

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## REPORTS OF MEDICAL EXAMINATIONS FOR VETERANS ADMINISTRATION RATING AGENCIES

The National Rehabilitation Commission of the American Legion wishes to call to the attention of the medical profession that many veterans who are attempting to get disability claims adjudicated before Veterans Administration rating agencies are experiencing delays and handicaps in accomplishment of final rating because of physicians' reports and statements which are unsatisfactory or not acceptable to the Veterans Administration for one reason or another. The purpose of this statement

*(Continued on Page 802)*

FROM SECRETARY OF DEFENSE LOUIS JOHNSON—

# AN URGENT APPEAL TO YOUNG DOCTORS!



*Your personal help is needed to avert a serious threat to our national security!*

By the end of July of this year we will have lost almost one-third of the physicians and dentists now serving with our Armed Forces. Without an increased inflow of such personnel, the shortage will assume even more dangerous proportions by December of this year.

These losses are due to normal expiration of terms of service. The professional men who are leaving the Armed Forces during this critical period are doing so because they have fulfilled their duty-obligations and have earned the right to return to civilian practice.

Without sufficient replacements for these losses, we cannot continue to provide adequate medical and dental care for the almost 1,700,000 service men and women who are the backbone of our nation's defense.

## ***Normal procurement channels will not provide sufficient replacements!***

To alleviate this critical, impending shortage of professional manpower in the three services, I am urging all physicians and dentists who were trained under wartime A. S. T. P. and V-12 programs under government auspices or who were deferred in order to complete their training at personal expense, and who saw no active service, to volunteer for a two-year tour of active duty, at once!

We have written personally to more than 10,000 of you in the past weeks urging such action. The response to this appeal has not been encouraging, and our Armed Forces move rapidly toward a professional manpower crisis!

Many responses have been negative, but worse—a great number of doctors have not replied. It is urgent that we hear from you immediately!

*We feel certain that you recognize an obligation to your fellow men as well as to your profession in this matter. We are confident that you will fulfill that obligation in the spirit of public service that is a tradition with the physician and dentist.*

There is much to be said for a tour of duty with any of the Armed Forces. You will work and train with leading men of your professions. You will have access to abundant clinical material; have the best medical and dental facilities in which to practice. You will expand your whole concept of life through travel and practice in foreign lands. In many ways, a tour of service will be invaluable to you in later professional life!

*Volunteer now for active duty. You are urged to contact the Office of Secretary of Defense by collect wire immediately, signifying your acceptance and date of availability. Your services are badly needed. Will you offer them?*

*Louis Johnson*



## REPORTS OF MEDICAL EXAMINATIONS FOR VETERANS ADMINISTRATION RATING AGENCIES

*(Continued from Page 800)*

is to clarify what the Veterans Administration desires of physicians' reports to adjudicate claims properly. The Veterans Administration regulations require that the physician's statement be notarized only in initial establishment of service connection for a specific disease or condition. While this requirement is considered a waste of time by most physicians, it is a Veterans Administration requirement in establishing initial service connection. However, most doctors will be examining and working on reports for veterans who have already had service connection established, and are conducting the examination to determine whether the condition has improved, regressed or remained stationary. In such cases, the statement on the physician's letterhead is sufficient. Notarization is not required in these cases.

Since claims may be made months or, in some cases, years after the physician has examined or treated the veteran for a given condition, the doctor should state in the body of his report whether the information is from his office or clinic records, or from memory. Since Veterans Administration adjudication personnel have among their number physicians, or they can obtain the advice of Veterans Administration doctors, the reports should be in professional language with no attempt to simplify the terminology for lay interpretation. Interpretation of the validity of the doctors' data in relation to the veteran's claim will be made by medical personnel. Therefore the reports should be as complete and detailed as possible.

In the report, the date of first treatment and the length of time the veteran has been observed by the doctor should be included. Details of the pertinent history and physical examination are essential. The detailed medical findings, both physical and laboratory, should be included. For instance, degree of extension or flexion of an ankle may be very important in determining adjudication results. Such detailed medical findings should be listed by the reporting physician. When this is done, the final diagnosis made by the doctor can be interpreted in the light of the data that led to the making of the diagnosis. It is not sufficient merely to state that the veteran was treated for a given condition, without giving some of the perti-

nent facts relative to the condition in the particular veteran. If laboratory tests or roentgenologic or other special examinations are done, reports of these should be included, if such reports are available. Some of these data may be valuable to aid the Veterans Administration in establishing the merit of a veteran's claim.

In summary, the medical report for the veteran for adjudication purposes should be complete and as detailed as possible. History, physical examination, laboratory and special examinations, with dates of period of observation and performance of examinations, are desired. Only with such complete reports can justice to the claim of the veteran be done by the Veterans Administration adjudication agencies.

## VOLUNTARY HEALTH SERVICES

A great many organizations, both public and private, are active today in working toward better health. Furthermore, these organizations reach into every part of the country and offer a wide variety of services, according to a report just released by the Research Council for Economic Security, Chicago.

The Council's report, entitled "Roads to Better Health," points to public health and welfare organizations, military medical services, private medicine, prepaid medical care plans, and industrial programs as existing instruments with which to improve the health status of the nation.

Under public health and welfare programs, free hospitalization is available for the needy at state and county hospitals, which have a total of 817,000 beds throughout the country. In addition to hospitalization, medical care for low income groups is provided by federal, state, and local governments, and social agencies. About 5,000,000 persons currently use these facilities.

Another 120,000,000 persons receive medical care under private medical practice, either through the fee-for-service system or under one of the medical prepayment plans. The Council estimates that 56,000,000 persons are enrolled in prepaid hospitalization plans, 28,000,000 are covered by prepaid surgical benefits, and 13,000,000 are enrolled in prepaid medical plans. The army of private medical practitioners includes 170,000 physicians, 45,000 specialists, 435,000 nurses, and 83,000 dentists.

Industrial health programs for employees are another avenue to better health. Some 18,000 factories and business establishments provide industrial nurses, medical services, examinations, plant sanitation and hygiene. Employee benefit plans, offering protection to the worker on a voluntary basis, are rapidly increasing in volume and coverage. About one-half of the nation's total labor force, or 30,000,000 workers, are covered by workmen's compensation.

The Research Council, a nonprofit, nonpartisan organization, has been making studies in the field of health and social security since its inception four years ago.



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# Highlights from Under the Bushel

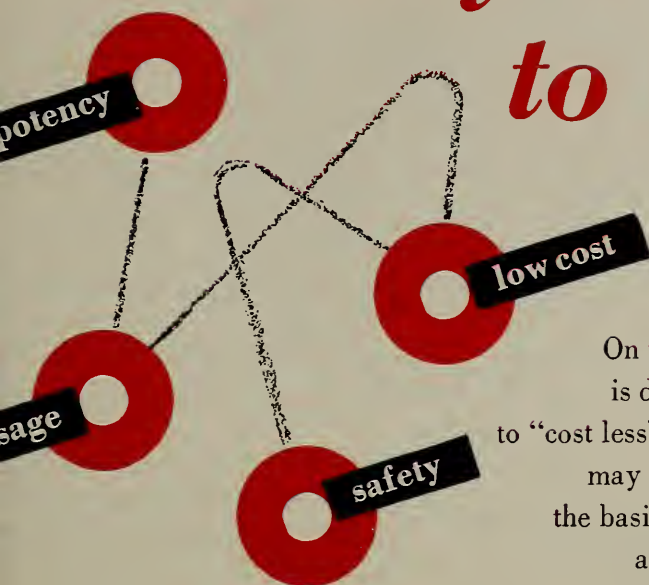
By L. W. Hull, M.D.

Chairman, Special Committee On Education

Top honors in this month's list of orchids for accomplishment go to the Bay County Medical Society! It has submitted to Lansing enough lists of "20" to qualify as the **first county group** to obtain names for 100 per cent of its membership . . . **Credit for this feat belongs to Bay County CAP chairman F. Pitkin Husted, M.D. and his top-flight salesman, Councilor Fred H. Drummond, M.D.** . . . Someone made the comment recently that "under socialized medicine, **pay-day** would really be "**pay**" day . . . R. C. Conybeare, M.D., Benton Harbor, has hit the speech circuit with a vengeance; he's made eight talks recently, with two groups passing resolutions against political medicine after he was finished . . . **The Copper Country sends word that Paul S. Sloan, M.D. of Houghton has over fifty-one names on his list of twenty** . . . Chairman of the Radio Committee for the Saginaw County Medical Society, Richard Ryan, M.D., has arranged for a series of broadcasts about socialized medicine over local station **WSAM** . . . **Another Saginawian, John E. Manning, M.D., has written personal letters to more than thirty-six Congressmen in Washington and already has received replies from most of them** . . . Still Saginaw; W. K. Slack, M.D., reports that Congressman Fred L. Crawford in a recent letter stated "that never before in his fourteen years in Washington has he seen so many well written, intelligent letters from constituents as are those written about socialized medicine" . . . **C. E. Umphrey, M.D., one of Detroit's Councilors, reports unusual success with the petition form he has on his wall. It reads, "If you prefer me to Uncle Sam, sign here"—the signers run into the hundreds** . . . Tuscola County Medical Society has been running a series of advertisements in local papers relative to socialized medicine—they report a good reception from readers . . . In the last AMA publication of resolutions obtained from the forty-eight states, Michigan (like Abou Ben Adhem) led all the rest with 118 resolutions; New York was second, while some states failed to report a single resolution . . . By the time this reaches you, Michigan should have

over 400 separate resolutions passed . . . H. T. White, M.D., one of the dynamos in **Genesee County's** active program, has thrown out the suggestion that people might be impressed if all physicians were to operate for two weeks exactly as they would have to under a socialized system . . . **What is your thought?** . . . An active lay personality in CAP work is Mrs. Alice Diehl, Woman's Editor of the *Michigan Catholic*. Mrs. Diehl has written an excellent magazine article and is making talks before League of Catholic Women and Catholic Study Club groups . . . **Wayne County's CAP horizontal progress is being made under leadership of Alfred H. Whittaker, M.D., who heads the Inter-organizational CAP Committee. On May 17 he held a meeting with Detroit life insurance underwriters, dentists, druggists, lawyers, general insurance agents, health and accident insurance agents and others. Intensified action on part of all concerned resulted** . . . Upper Peninsula radio stations are devoting much free time for broadcasts of speeches made by physicians and field workers . . . **Special congratulations to H. V. Lilga, M.D., CAP chairman in Petoskey, for his letter-writing campaign to civic leaders in other cities. His work with the union labor ranks is also bearing fruit** . . . J. S. DeTtar, M.D., energetic physician, author and public speaker, delivered one of the principal addresses at the annual meeting of the Michigan State Pharmaceutical Association held early in June at Mackinac Island . . . The St. Joseph County Medical Society, with individual thanks to J. P. Sheldon, M.D., and S. A. Fiegel, M.D., can well be proud of the joint meeting held June 6 with the druggists, dentists and morticians in their county; the meeting brought promises of the closest of active co-operation between all these groups in the CAP program ahead . . . **Contributions for this column are requested** . . . Let the Special Committee on Education hear of the work that you and your colleagues are doing . . . We'll tell others about your activities.

# *many things to consider*



The choice of an oral estrogen depends on many factors—potency, dosage, safety and cost. On the basis of cost alone, a sound choice is difficult. An oral estrogen that appears to “cost less” may be wanting in potency; another may provoke troublesome side actions. On the basis of potency, however, the differences among oral estrogens are enlightening.

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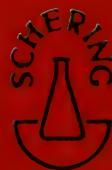
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# Cancer Comment

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## PROGRAM AND ACTIVITIES OF THE MICHIGAN CANCER CONTROL COMMITTEE

The Cancer Control Committee of the Michigan State Medical Society was first created in 1930 and for the next sixteen years consisted of seven members appointed annually by the incoming president. The committee met infrequently and served largely in an advisory capacity to those groups within the state interested in the cancer problem.

In 1935, the committee sponsored a state cancer survey by the American Society for the Control of Cancer (now the American Cancer Society, Inc.). The report of this survey, for the first time, summarized and analyzed the cancer problem in Michigan and suggested a program of education and clinical care in which the medical profession has the leading responsibility.

In 1943, in co-operation with the Michigan Department of Health, the "Cancer Manual for Physicians" was published and distributed to all members of the Michigan State Medical Society, medical health officers and other groups concerned with cancer in Michigan. This volume, written by Michigan physicians, created a wide interest in this country and in many foreign countries. It has been translated into several foreign languages.

In 1946, the membership of the Cancer Control Committee was enlarged to twenty-five and included representation from the Michigan Department of Health and the two Michigan Divisions of the American Cancer Society. A full-time medical secretary was appointed from among the membership and an office established at 1313 E. Ann Street, Ann Arbor. The committee's activities are financed by the four supporting organizations and by occasional contributions from other sources.

The committee, through subcommittees appointed by the chairman, considers problems in the field of cancer control related to Michigan. Lay and professional education, service to the cancer patient, medical examinations to detect cancer in early and curable stages, and similar problems command the committee's attention.

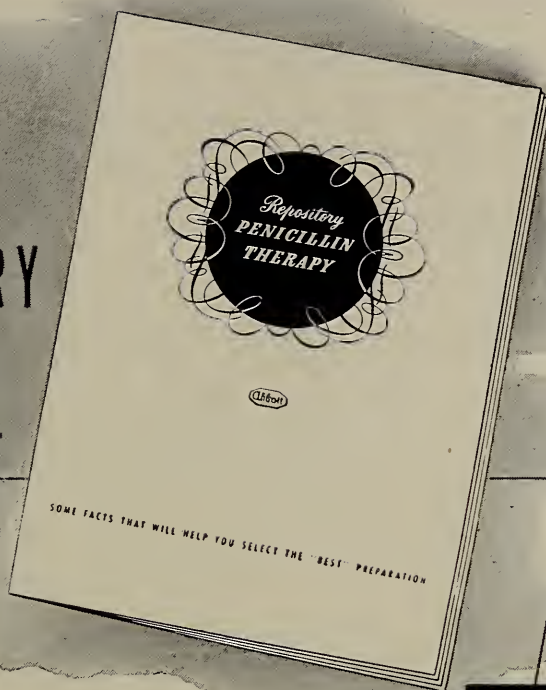
The following list of major activities of this committee, as at present constituted, is presented

for the information of those interested in its work:

1. Provided all members of the Michigan State Medical Society with: (a) Volume I, *The Michigan Cancer Bulletin*, thirteen numbers; (b) Volume II, *The Michigan Cancer Bulletin*, twenty-one numbers.
2. Supplied the Michigan Cancer Program brochure—30,000 copies—to all Michigan physicians, dentists, pharmacists, hospitals, and local health departments for public distribution in their areas.
3. Provided speakers for many medical meetings.
4. Made cancer incidence and prevalence studies in four selected areas in Michigan. Published report of these studies. (See *Michigan Cancer Bulletin*, Vol II, Supplement).
5. Made a survey of Michigan hospitals to determine facilities for diagnosis and treatment of cancer, and also the number of cancer patients hospitalized in 1946. Published report of this study. (See JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, July, 1948, page 706.)
6. Assisted in organization of cancer detection centers in Michigan.
7. Surveyed cancer detection centers in Michigan in 1948. Published report of survey. (See JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, April, 1949, page 441.)
8. Assisted in development of the Hillsdale Plan for Tumor Detection which has aroused nation-wide interest as the best plan yet offered for making "Every Physician's Office a Cancer Detection Unit." Published description of plan and analysis of its first year's experience. (See JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, April, 1949, page 445.)
9. Helped promote a three-day cancer institute for public health officers and nurses at School of Public Health, University of Michigan.
10. Participated in the Inservice Training Course on Community Health Services at School of Public Health, University of Michigan.
11. Conducts a Cancer Comment page in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

(Continued on Page 808)

# Q. and A. OF REPOSITORY PENICILLIN



• Why should a busy practicing physician bother about understanding the factors that influence penicillin blood curves?

• Are blood levels after penicillin procaine in aqueous suspension similar to those after penicillin procaine in oil?

• How are repository penicillin preparations best used?

• Can penicillin G potassium in aqueous solution be used for repository therapy?

• Which kinds of infections will respond to low levels of penicillin?

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# PROGRAM AND ACTIVITIES OF THE MICHIGAN CANCER CONTROL COMMITTEE

(Continued from Page 806)

12. Sponsors an annual cancer number of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

13. Made studies of cancer reporting in the United States.

14. Will conduct a cancer teaching day for physicians following the 1949 annual meeting of the Michigan State Medical Society.

15. Later this year will hold a meeting of organizations in Michigan interested in cancer control to discuss the committee's statewide program of periodic medical examinations (The Hillsdale Plan) to detect cancer in early stages.

16. Provided broadcasts for Michigan radio networks.

17. Furnished speakers for many lay cancer meetings. Supplied outlines to many speakers.

18. Assisted in developing local cancer control programs.

19. Answered many telephone and written requests for information about cancer from Michigan and other states.

20. Stands ready to assist in development of cancer education and control programs in any part of Michigan.

A slow or incomplete recovery from an acute respiratory infection, especially in a male between the ages of forty and seventy, may be the first indication of bronchogenic cancer.

• • •

A transient wheeze accompanies primary cancer of the lung in 10 to 15 per cent of patients.

• • •

Weight loss is a frequent companion of pulmonary carcinoma.

• • •

Dyspnea and pleural effusion are associated with local invasion of the pleura in lung cancer.

\* \* \*

Neurological symptoms suggestive of a primary brain tumor may be the presenting signs of a bronchogenic carcinoma.

• • •

Positive histological evidence of malignancy is obtained in 42 to 62 per cent of all cases of lung carcinoma.

• • •

Cough is the first symptom in over half the cases of pulmonary carcinoma.

The physician who "watches" that "something" in the patient's lung often watches the patient die.

• • •

Carcinoma of the lung occurs five times more frequently in men than in women.

• • •

Increase in the five-year survival rate can and will be effected when full use is made of existing diagnostic techniques—when every person with "something" in his chest is given the benefit of a thorough and complete examination, pursued until the physician can state unequivocally and without reservation that the patient does not have any evidence whatsoever of pulmonary cancer.

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# IMPORTANT NOTICE

TO MEMBERS of the WAYNE COUNTY MEDICAL SOCIETY

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Was terminated	AT AGE 65 (guaranteed renewable to 65)	NOW OPTIONALLY RENEWABLE AFTER 65

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# Resolution re A.V. Wenger, M.D.



Forty-six years of unbroken attendance at the annual sessions of the Michigan State Medical Society were recognized at the eighty-third session held in Detroit last September when an appropriate resolution was tendered to Aaron Verne Wenger, M.D., Grand Rapids surgeon, by the Michigan State Medical Society House of Delegates.

In addition to the perfect attendance record, Dr. Wenger was honored for his more than thirty-one years as a member of the Michigan State Medical Society House of Delegates.

Dr. Wenger, who was born in 1877, received his medical degree from the Grand Rapids Medical College in the year 1901. He began his practice in the same year.

The resolution to Dr. Wenger read as follows:

"WHEREAS, A. V. Wenger, M.D., has established a record of unbroken attendance at the meetings of the Michigan State Medical Society since 1902, a period of forty-six years, and

"WHEREAS, Doctor Wenger has served the State Society as a Delegate of Kent County continuously from 1917 to date, a period of thirty-one years, and

"WHEREAS, Over this period his effort has been without recompense, therefore be it

"RESOLVED, That this House formally recognize such unselfish and understanding effort in behalf of medicine and the physicians of Michigan by hereby expressing its gratitude to Doctor Wenger and further be it

"RESOLVED, That the Secretary be instructed to advise Dr. Wenger of this action and that the publication of this record be made in THE JOURNAL of the Society in a prominent position."

## PR In Practice

### SPEAKERS BUREAU

The following names have been added to the list composing the MSMS Speakers Bureau as published in last month's JOURNAL.

#### *Gratiot-Isabella-Clare*

E. S. Oldham, M.D., Breckenridge  
L. L. David, M.D., Mt. Pleasant  
Kuno Hammerberg, M.D., 622 McEvan, Clare

#### *Kent*

John R. Pedden, M.D., 1144 Madison, Grand Rapids  
James Ferguson, M.D., 72 Sheldon, S.E., Grand Rapids  
C. Allen Payne, M.D., Blodgett Memorial Hospital, Grand Rapids  
Fred C. Brace, M.D., 1498 Lake Drive, S.E., Grand Rapids  
John R. Olson, M.D., Medical Arts Bldg., Grand Rapids  
Wm. A. Hyland, M.D., Metz Bldg., Grand Rapids  
A. B. Smith, M.D., Metz Bldg., Grand Rapids  
W. C. Beets, M.D., Loraine Bldg., Grand Rapids  
Wm. R. Torgerson, M.D., Metz Bldg., Grand Rapids  
Howard Benjamin, M.D., 514 Medical Arts Bldg., Grand Rapids  
Paul Kniskern, M.D., Medical Arts Bldg., Grand Rapids

#### *Mecosta-Osceola-Lake*

Edward VanAuken, M.D., Big Rapids  
G. H. Yeo, M.D., 126 Maple St., Big Rapids  
J. A. White, M.D., 121 S. Michigan Ave., Big Rapids

#### *Oakland*

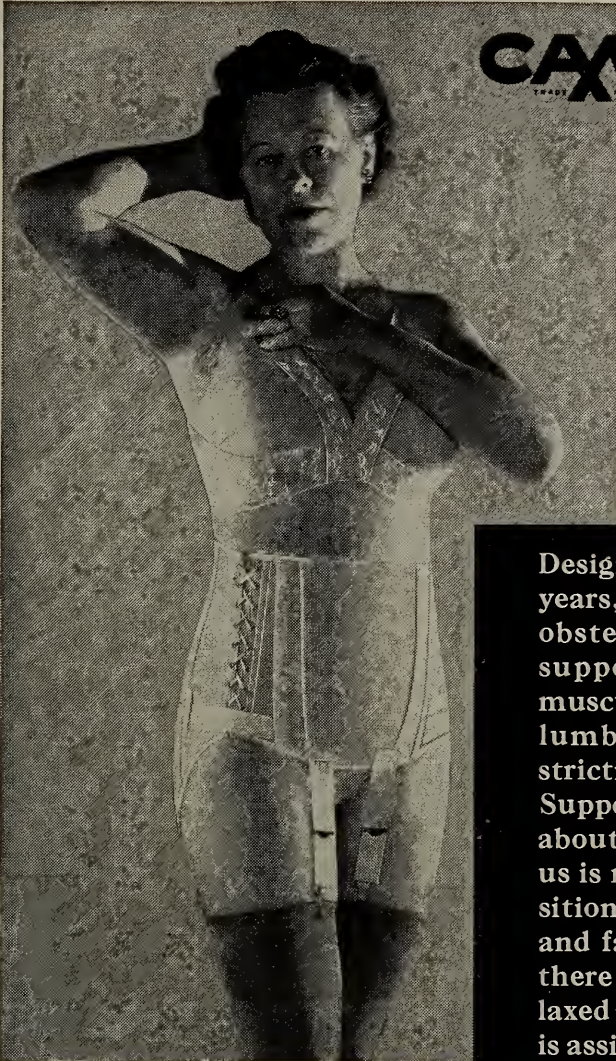
Robert Baker, M.D., 1110 Pontiac State Bank Bldg., Pontiac  
Otto Beck, M.D., 308 Wabcek Bldg., Birmingham  
Joseph Christie, M.D., 1201 Pontiac State Bank Bldg., Pontiac  
O. R. MacKenzie, M.D., 128 Common St., Walled Lake

#### *St. Joseph*

S. Albert Fiegel, M.D., 110 Pleasant St., Sturgis  
R. J. Fortner, M.D., 218 East St., Three Rivers  
E. M. Gillespie, M.D., 104 W. Chicago, Sturgis  
R. A. Springer, M.D., 125 Market, Centerville  
R. Zimont, M.D., 100 S. Washington, Constantine  
N. B. McGrath, M.D., 226 East St., Three Rivers  
J. P. Sheldon, M.D., S. Clay, Sturgis

#### *St. Clair*

Walter Boughner, M.D., Algonac  
J. L. Sanderson, M.D., 515 Pine St., Port Huron



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# Socialized Medicine

## FREEDOM BEST IN MEDICAL FIELD

Freedom works best, whether it is in the economic field or the medical field. The countries that have kept their doctors free of governmental control, America, Norway, Sweden and Denmark, have the best health records of all the nations in the world.

If we in America are going to try to improve our health standards even more, the best way is to do it through some method that prevents the federal government from controlling the medical profession.

Eugene C. Pulliam, publisher of *The Star*, described in Friday's article from Copenhagen the way in which Norway, Sweden and Denmark have provided medical facilities for all their people without federal control and without government insurance. These countries have "the best public health programs in the world." The reason they do is because their doctors have been kept free.

While the three countries differ in some of the details of the public health programs, they all agree on one point. Those who can pay for medical care do so through private, government-approved insurance companies. Those who cannot pay (in Denmark and Norway that includes those who earn less than \$2,000 a year), are automatically covered through private insurance with government aid.

Plans similar to these Scandinavian health programs have been proposed in several bills introduced in the United States Senate. Both Republicans and Democrats have sponsored them. They all provide for voluntary, private insurance programs and they all cover those who cannot afford to pay themselves.

They also provide needed help in enlarging the number of doctors and hospitals in the United States, which has to be done if we are to extend the benefits of our already advanced medical care programs to more people.

If Congress is going to learn from the experience of others in devising a better public health program in the United States, the place to learn is from the successful, and not from the unsuccessful.

Germany tried socialized medicine and ruined its medical system.

Britain is trying it, and British doctors are bogged down with red tape and hordes of patients.

The Scandinavian countries have based their health programs on liberty and have set an example of outstanding success that we would do well to follow.—*Indianapolis Star*, May 8, 1949.

## COMPLETE LIST OF ORGANIZATIONS IN MICHIGAN WHICH HAVE PASSED RESOLUTIONS OPPOSING SOCIALIZED MEDICINE

All County Medical Societies  
All County Woman's Auxiliaries  
Bay City Chamber of Commerce  
Birmingham Chamber of Commerce  
Caro Board of Commerce  
Chamber of Commerce of Fremont, Michigan  
Dearborn Chamber of Commerce  
Detroit Archdiocesan Council of Catholic Women  
Detroit Business Woman's Club  
Detroit Sorosis Club  
Easton Community Farm Bureau, Ionia County, Michigan  
Evangeline Home and Hospital Staff, Grand Rapids  
Flint Chamber of Commerce  
Genesee County Dental Society  
Greater Jackson Association Board of Directors  
Houghton Rotary Club  
Isabella-Clare Counties Automobile Dealers Association  
Ishpeming Rotary Club  
Kalamazoo Chamber of Commerce  
Lansing Life Underwriters  
Larned Post No. 1, American Legion  
Legislature of the State of Michigan  
Metropolitan Club Auxiliary (East Detroit Chapter)  
Michigan Association of Collection Agencies, Inc.  
Michigan Chiropody Association  
Michigan Hospital Association  
Michigan Junior Chamber of Commerce  
Michigan Postgraduate Clinical Institute  
Ontonagon Chamber of Commerce  
Port Huron Chamber of Commerce  
Republican State Convention  
Royal Oak Chamber of Commerce  
United Daughters of Confederacy  
Wayne County Womens Republican Club  
Westminster Presbyterian Woman's Church Group (Detroit)  
Wyandotte Republican Woman's Club

## "NOTHING FOR SOMETHING"

Cyril Palmer, noted London editor, has this to say: "The British experiment in socialized medicine is an unfortunate swindle from start to finish. This is so because it pretends to offer something for next to nothing, and actually gives nothing for something."



## for Constipated Babies

Borcherdt's Malt Soup Extract is a laxative modifier of milk. One or two teaspoonfuls in a single feeding produce a marked change in the stool. Council Accepted. Send for sample.



**BORCHERDT MALT EXTRACT COMPANY, 217 N. Wolcott Ave., Chicago 12, Ill.**

# The JOURNAL

*of the Michigan State Medical Society*

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 48

JULY, 1949

NUMBER 7

## Public Health and Private Medical Practice

### *An Unbeatable Team*

By Haven Emerson, M.D.

New York, New York



THE MARRIAGE of government and medicine, or, if you prefer, the partnership of science and society, has brought benefits of almost unbelievable quality and volume to mankind around the world. No least tribe or mighty nation has escaped the beneficence of the advances of the many

sciences contributory to the diagnosis, treatment, and prevention of disease. At least in this ever-expanding area of human inquiry, thought and practical activities, there is truly an international understanding, fellowship, interchange of information, mutual cultivation of common concern, rivalry in well doing, and so determined a loyalty to truth that even the temporary hindrances of language, the artificial curtains of political expediency and the accidental differences of financial resources of peoples and nations have failed to arrest or long delay the global spread of medical science. Further, it may be remarked that at all times the inherent qualities of biology, the essential forces of evolution, are constantly and everywhere working to the same ends, which are, in brief, a wider variety and more constant volume of human excellence.

It is not by accident that we so commonly refer to the triad of medical objectives in the usual order of their expression: diagnosis, treatment, and prevention of disease. To know, to serve the sick, to make sickness rarer and less deadly. These are our purposes, the goals of all who in fact or theory subscribe to the oath of Hippocrates.

Yes! We can look the idealist straight in the eyes who tends to forget sickness in his ambition to feature health and its workshop as of superior, of prior importance. We can make clear by the example of our lives and the precepts of our teaching that health must have its diagnosis as well as sickness and that health, while a noble hope and ambition, is but the end result of all those genetic accidents of origin, those factors of breeding and surroundings, those episodes of struggle within and without the body and mind which are the unescapable lot of every living thing in the ceaseless struggle for survival.

We of the sciences of human biology, licensed by our fellow citizens to wield the knife of life or death, exhibit the poison that may kill or cure, condemn or save the soul of man by word or deed, we, I say, are guardians of the household of humanity, privileged to see that the game of life is played fairly and according to rules which in a measure we can write if we are wise enough to learn and use the secrets, the priceless truths of Nature. For the very good reasons that man is his own worst enemy, is both sinner and saint, can be more ruthless than the teeth and claws of beasts in enslaving his fellows by the devices of business, commerce, competition, monopoly, law, and even by apparently innocent co-operation within groups, government has had to intervene, to intercede, to interdict, to order, direct, regulate and control certain aspects of human relations for the sake of health.

We cannot trust all parents to be intelligent, un-

Presented at the eighty-third annual session of the Michigan State Medical Society, Detroit, September 23, 1948.

JULY, 1949

825



selfish, forethoughtful and alert in the interest of their own children.

Even those persons blessed, or cursed, with high intelligence quotients cannot be trusted to sell clean milk to their neighbors or to so conduct their own bodies and lives as to cause no damage in their own homes or on the public highway. The philanthropist on Sundays and feast days may overlook the hazards of dust, fumes, fatigues, and chemical poisons in the army of workers who in the rest of the week produce the commodity that creates his wealth.

For such reasons it became apparent that society as well as the individual, the community as well as the family, must share in the employment of science for self-protection.

Recorded history goes but little further back than the time when there was medical care and provision for the sick. Religion has always been preoccupied with the miraculous cures of the temple, by the intervention of divinity or by some unexplained accident.

Our story of public health has but a century of life and lies open to the simplest mind to read and understand.

The first parliamentary act which started Great Britain on the pathway of modern public health was passed in 1848, because it was clear from abundant evidence that inequalities in the length and quality of life and survival were related to some aspects of public housekeeping, to the conditions of housing, wages, work, rest, food and exposure to disease in jails, hospitals and alms houses.

Out of that beginning has been built today's structure of public health services, which in brief words can be defined as the application of the sciences of preventive medicine for social ends.

Public health is not only health of the public, i.e., the composite life situation of all individuals as members of a group, city, county, village or state, but it is health protected by the public, i.e., by that organism we have created and live under, the civil government of a representative democracy.

As our greatest citizen Abraham Lincoln wrote, "The legitimate object of government is to do for a community of people whatever they need to have done, but cannot do at all or cannot do as well for themselves in their separate and individual capacities. In all that the people can do as well for themselves the government ought not to interfere."

Testing our present pattern of public health by

this wise definition of the function of government, we need not be ashamed of the effort so far made nor feel guilty of unnecessary intrusion upon personal prerogatives and responsibilities of free citizens. Remember, please, that it has been the medical profession, the boards of health, the health officers of local units of population all over our country who have woven the pattern of public health into the warp and woof of local government, often and increasingly in recent decades against the clamor, the insistence of those among us who would exalt government over the individual, raise the state rather than the person, the parent, the family, as the source of all policy and direction, and invest all power and authority in the hands of salaried officials of the federal government, elected or appointed, while removing all sense of responsibility, initiative and sense of self-direction from the wage earner, the housekeeper, the physician, the merchant, and from the local jurisdiction of the people.

Without government in medicine, and medical sciences in the structure of public affairs, i.e., the application of the only two health resources of government, authority under the law and the influences of education, we could not apply knowledge to the betterment of health as we now understand the facts of preventable disease and disability and premature death. Six illustrations will suffice.

Without the certified accounting of human existence, the bookkeeping of vital statistics, we could prove neither the amount, distribution or causes of death, the cost of human reproduction, the wastage of lives of mothers and babies, nor could we do more than guess at the results of measures directed against particular diseases and causes of death. No private individual, no physician, society or business could possibly collect, verify, tabulate, analyze, interpret and publish the records of births, sickness and deaths among our people. This is chronologically and functionally the first and most important public health duty.

The control of communicable diseases which demands interference with the full liberty of the person, and perhaps of some of his property, living premises and occupation, would be quite out of the question without the application of the police power of the state delegated to the health officer and his authorized agents.

Environmental sanitation, that is, management of man's physical envelope in the interest of health,

what he eats, the air he works in, the water he bathes in or drinks, the food processed, stored and served to him, his cow and pig, the flies, fleas, lice, and mosquitoes he tolerates—these are not matters of personal choice but may be matters of life and death. To whom can these be trusted but the sanitary engineer, the epidemiologist, the industrial hygienist? Only the professionally trained agent of science and society, the personnel of the local health department, can be trusted with authority over these many causes of preventable diseases.

The brain trust of the health department is its diagnostic laboratory. The shop where the basic sciences are used to bring accuracy and promptness into diagnosis, to permit uniform enforcement of milk quality, of water safety, of dusts and gases in shop, foundry, and factory. What was once a convenience and a privilege offered to the practicing physician to help him to save the child with diphtheria is now his consultant, his research assistant, the right hand of the epidemiologist, the detective of unsuspected factors of disease in flowing streams, in school lunch rooms, in the very air we breathe. The public health laboratory is indispensable alike to the community hospital, the ice cream manufacturer, the physician on his daily round of visits and to the householder who fears spoiled food.

No one of these four functions of the local health department is separable from the needs, the services, the day-by-day concern of the practicing physician who is not uncommonly the first source of information calling for action by the health department. The last two examples I would offer are of a different order, representing the resources of information, of persuasion rather than of authority. I refer, of course, to the most lately developed of the bureaus or divisions of local health departments not yet forty years old, namely those of maternity, infancy and child hygiene and of public health education.

Society has no greater concern with any aspect of preventive medicine than that which affects its own survival and the quality of the succeeding generations. In no field of public health has the general practitioner, the obstetrician and pediatrician made more effective and generous contributions than in the analysis of causes of maternal and infant deaths and in using the full resources of professional opinion and organization for their abatement.

Without the public health nurses and the co-

ordinating resources of the health department, supplemented by all agencies of public information, the present unprecedented successes in life extension could not have been achieved. The practicing physician and the full-time professionally trained and experienced health officer are inseparable and indispensable from the points of view of applied science, of community need and service and for their respective professional careers. There can be no conflict of interest, no divergence of concern, no public confusion as to the functions of the physician in private practice and the health officer of civil government, if the distinctions are kept clearly in mind as to the demand and reasons for their existence, for the family physician and the related specialists in and out of hospitals, personal care in sickness and health of those who seek his services, and for the health officer the application of authority and education to do for the community what neither patient nor his own doctor can separately do for his protection against avoidable hazards of preventable disease.

The board and department of health on the part of local government and the county medical society on behalf of the medical profession constitute the orderly, authoritative and mutually considerate bodies to which should be brought, and be entrusted with, the solution of any differences of opinion, preferably without recourse to the daily press, to mutual criticism or recrimination.

In all matters apparently or possibly affecting personal and patient medical relationships because of health department projects, agreement with the physicians of the community should be reached prior to any public declaration.

Whenever industry, labor, or private property is likely to be affected by the exercise of authority under the sanitary code, citizen understanding and acceptance should be sought by the board and officer of health to avoid recourse to the courts for purposes of enforcement.

Team play, reciprocal obligations and functions at a professional level, mutual consideration, definition of and respect for the privileges and special competence of the physician to the family and of the health officer of the community constitute the elements of success for that particular unbeatable partnership referred to in the title of my paper.

May I take a few minutes more to urge you to give careful thought as to the meaning and use of certain terms commonly bandied about and often the cause of misunderstanding by the public, and



then refer very briefly to the relative place and importance of the local and the state federal and international health organization.

Public health, state medicine, social medicine, socialized medicine, organized medicine, the medical profession, medical care insurance, sickness insurance, health insurance, administrative medicine, organized care of the sick, official and voluntary agencies—these are but some of the terms which must be used with distinction and precision and with a certain uniformity when we present arguments pro and con.

My personal preference is to deal with questions currently at issue by defining and using the terms public health, the medical profession, medical care insurance, administrative medicine, organized care of the sick and official and voluntary agencies for health and care of the sick.

Before closing, I beg your indulgence for a word on behalf of the local health department as the primary and essential unit of public preventive medicine, and to urge your state and local medical societies to concentrate all proper influences within this state upon the completion, reinforcement, financial and popular support of this basic activity of local civil government. The part-time, amateur, politically dependent, small town, city and county health officer may have been a necessity in pioneer days. He is today an anachronism, a hazard and a functional incompetent in the modern scheme of public health.

The trained health officer is a specialist of no less worth than is the clinical specialist in medicine and surgery, and his salary should be comparable to the net income of his professional colleagues caring for the sick.

Without full-time, adequately staffed and financed, local health departments under trained medical leadership, serving every community and local jurisdiction of a state, the state department of health can play but a weak role, the plans of any federal health undertaking will be largely frustrated and international health effort will remain a gesture of words rather than a reality of action.

Make of Michigan a state with total local health coverage, welcome the local health officer as the colleague of the family physician, the hospital superintendent, the clinical specialist of the community, and you can promise your own hometown public a quality and rate of progress in health unattainable by any plan in any nation where com-

pulsion and government dominance of medicine are proposed.

Preventive medicine is an integral part, an essential component of all good private practice of medicine. Public health services are but the necessary supplements to private practice through the authority and educational resources of civil government. Both are accepted throughout our nation and should not be tampered with by politicians or split by the controversies of those who have social theories to promote but are incapable of carrying the responsibilities of the physician or the authority of sanitary law.



### SHALL CONGRESS "BISMARCK" AMERICAN MEDICINE?

Editor Ralph W. Gwinn of the Committee for Constitutional Government recently wrote: "The President has said America should try socialized medicine. So Congressmen are looking into the matter. Some of the things they are finding are curious. . . . The first modern nation to try what the President has recommended was Germany—under that famous 'democrat' Prince von Bismarck. What was the result? Certainly socializing medicine made the government bigger and bigger. But back in 1885 the average German who became sick got well in fourteen days. By 1929 after thirty-five years of socialization it took him twenty days. By 1932 he needed twenty-nine days of government medicine before he was able to work again.

"Sickness is a difficult thing to measure. Perhaps statistical sickness is something more than sickness. Those who are familiar with the matter, say that with the government paying doctor, hospital and sickness benefits, official sickness often becomes indistinguishable from a paid vacation. As an example, they cite the German experience in 1930 . . . it was a depression year and an emergency decree was issued to take effect on September 1. It required insured persons, formerly treated 'free,' to pay, in addition to their regular contributions, 12 cents for their first visit to the doctor. The result was amazing. In one community during the last week in August the doctors had 30,300 patients. The first week after the 12-cent charge went into effect, the number fell to 8,800—a drop of more than two-thirds."

### POTATOES IN POLITICS!

The politicians with potatoes in their paunches and in their portfolios didn't know what punches they were pulling when they put potatoes in politics.

Pulling \$2,000,000 annually out of the people's pockets to pay potato planters parity-plus pyramids the popular price, impoverishes the dinner pot and pauperizes the general population in favor of the potato plutocrats.

It requires 1,000,000 common people paying an income tax of \$200 to pacify the 28,444 potato planters. The downtrodden planters in Rhode Island unloaded enough potatoes on the taxpayers to average \$23,206 per grower. In Massachusetts \$12,229, in Maine \$9,825, in New York \$13,169 and so on down the line.

The wisdom of our government is beyond finding out. Apparently having demonstrated their expertness in the handling of potatoes the bureaucrats are ready to take on the physicians. Compared to the cost of socialized medicine, everything else can be counted as small potatoes.—Editorial, *The Journal of the Oklahoma State Medical Association*, July, 1949.

# Hysterectomy

## Present-Day Indications

By Richard W. TeLinde, M.D.

Baltimore, Maryland



SINCE 1844 when Atlee performed the first hysterectomy, more than a hundred years have passed, and the operation, which at that time was considered a great surgical feat, has become a commonplace procedure in every operating room. The operation may be one of the simplest of

surgical procedures, but on occasion it may be extremely difficult and fraught with danger of injury to the vital structures, such as the bowel, bladder and ureters. The mortality for the operation in the better clinics is in the neighborhood of 1 per cent, and many of the deaths are attributable to unavoidable pulmonary embolism. However, in some hospitals staffed by occasional operators, the mortality is considerably higher.

Even though the operation is one which can be performed with relative safety, it should not be undertaken lightly. The psychic effect of hysterectomy, especially on the young, is considerable, and it should not be done without a thorough understanding on the part of the patient of the nature of the operation. Although no one has ever established the fact of an endocrine function of the uterus, many women have firmly fixed in their minds distorted views concerning the effect of removal of the organ. Some of these ideas are concerned with gain in weight, loss of figure, loss of libido and inability to be satisfactory sexual mates. The woman on whom hysterectomy is contemplated is entitled to a simple explanation of the facts. She may be truthfully told that aside from the loss of the reproductive function and the inconvenience of menstruation she may expect no physical or psychical change. The average woman will accept such an explanation readily, but occasionally one encounters a patient who remains antagonistic to the idea of hysterectomy in spite of a sympathetic explanation. It is well to present the facts to such

an individual and give her ample time to digest them. She will usually eventually fight the matter out with herself and concede the necessity of the operation. It is far better for her to make her own adjustment before the operation than to awaken from the anesthetic and find it a *fait accompli*.

The ease with which the average hysterectomy may be done has proven both a blessing and a curse to womankind. There is no doubt that a hysterectomy done with proper indications may restore a woman to health and even save her life. However, in the practice of gynecology one has ample opportunity to observe countless women who have been advised to have hysterectomy without proper indication. The financial reward to the surgeon is doubtless a factor in swaying some of the less scrupulous to advise hysterectomy when perhaps a curettage would suffice, but I am inclined to believe that the greatest single factor in promoting unnecessary hysterectomies is a lack of understanding of gynecological pathology. The greatest need today among men who are performing pelvic surgery is a better knowledge of gynecological pathology. I believe that this is true in spite of the requirements of the American boards of a knowledge of pathology. From my observation of those candidates for American boards who come to our laboratory seeking to prepare themselves for the examinations, it appears that a superficial knowledge is all that is desired, comparable to cramming on the part of a college student the night before an examination.

Let us then consider hysterectomy from the standpoint of the various pathological conditions for which it is indicated.

Fibroids constitute the most common condition for which hysterectomy is done. But let it be remembered that only symptomatic fibroids need be removed, with the rare exception of the removal of an asymptomatic fibroid by myomectomy because of its possible effect on future pregnancy. Also, rarely a large fibroid will press on a ureter quite asymptotically and cause hydronephrosis. Such circumstances call for hysterectomy.

The usual symptoms that indicate removal of a fibroid uterus are few and simply stated. They are excessive bleeding, pain from pressure of the enlarged uterus, twisting of a pedunculated tumor and enlargement of the abdomen. The incidence of malignancy in fibroids is somewhat less than 1

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per cent and just about balances the mortality from hysterectomy. Hence, the danger of malignancy does not constitute a justifiable indication for removal of an asymptomatic fibroid uterus unless some special conditions are present, such as bleeding or growth after the menopause.

In general, conservatism is advisable in recommending an operation for fibroids in young women anticipating pregnancy. Conservatism is also recommended in dealing with fibroids causing slight symptoms in women nearing their menopause, realizing that postmenopausal trouble is rare. We should never lose sight of the fact that fibroids may be entirely incidental in women bleeding late in their menstrual lives. A curettage and cervical biopsy may be all that is necessary in such women to exclude malignancy and prove that the bleeding is of a functional nature, perhaps associated with endometrial hyperplasia.

The second most common pathological lesion for which we perform hysterectomy is endometriosis. This interesting disease appears to be increasing in frequency. Certainly it is being recognized with increasing frequency, but in clinics where it has long been recognized it appears more often than formerly. In spite of being the second most common lesion requiring hysterectomy in our clinic, we perform conservative operations for it with preservation of the childbearing function more frequently than we do hysterectomy. In such instances we not only remove the diseased tissue in so far as possible, but also, frequently suspend the uterus and do a presacral neurectomy. In all women in whom the ovarian tissue is hopelessly destroyed by the endometriosis process, hysterectomy is indicated. In women past thirty-five with less extensive endometriosis, especially those in whom dysmenorrhea is a prominent symptom, hysterectomy should be combined with the necessary adnexal surgery. Even in young women whose past history indicates absolute sterility, there is little use in saving the uterus which can only be a source of further menstrual pain. In questionable cases it is our custom to perform tubal insufflation immediately before laparotomy for endometriosis. The information gained from this procedure will be helpful in deciding the advisability of hysterectomy.

Operations for acute and subacute pelvic inflammatory disease belonged to the past even before the advent of chemotherapy and antibiotics, except for the drainage of abscesses. Since the general use of chemotherapeutic and antibiotic

agents, the residuum of pelvic inflammatory disease has become less and less. Hence, the necessity of corrective operations has steadily decreased. Nevertheless, there still are some cases in which a symptomatic residuum calls for surgical relief. When salpingectomy is done, the uterus should be removed unless there is some adequate reason for saving it. There is little excuse for saving the uterus in a sterile woman when its preservation can only mean the possibility of further menstrual inconvenience, functional bleeding, myomata or even malignant disease. When considering salpingectomy, it is our custom to talk over the possibility of hysterectomy with the patient. Usually a simple explanation of the advisability of hysterectomy is all that is necessary to receive the patient's consent. If the patient, on the other hand, is adamant in her desire to keep her uterus, it is best to yield to her wishes if reasonable in the light of the pathologic condition found at operation. Occasionally, the difficulties encountered at the operating table in removing the adnexa or the condition of the patient will make it advisable to refrain from hysterectomy.

Hysterectomy is seldom necessary for functional bleeding. There is no doubt that hysterectomy is done too frequently for this troublesome but seldom serious condition. The therapeutic value of curettage is often too readily discounted. Although curettage is not curative in the sense that it corrects the underlying cause, in many instances bleeding is controlled until the condition recovers spontaneously. Hysterectomy should never be done for bleeding from the grossly normal uterus without first performing curettage and cervical biopsy. In no other way can one be certain of his diagnosis. If the bleeding is associated with hyperplastic or nonsecretory endometrium, it can usually be controlled by properly administered progesterone. Occasionally, functional bleeding may be recurrent and so troublesome that hysterectomy becomes necessary, but the younger the patient, the more reluctant one should be in resorting to removal of the uterus.

Hysterectomy for minor lesions such as chronic cervicitis or endometrial polyps is seldom justified, but investigation into the reason for hysterectomy in many hospitals shows that many uteri have been sacrificed for these minor lesions which could be cured by much lesser procedures.

I do not subscribe to the school of thought that advocates routine vaginal hysterectomy for uterine

prolapse. It is our opinion that each case of uterine prolapse with its allied conditions should be considered individually and a choice of procedures made depending on many circumstances. There are several other operations in addition to vaginal hysterectomy which will cure prolapse. Some of these procedures are of lesser magnitude and some of greater magnitude than hysterectomy. Each has its advantages and disadvantages which should be carefully weighed in each instance.

Finally, before closing the consideration of hysterectomy for benign uterine disease, I would like to express my thoughts on the all too prevalent practice of performing total hysterectomy routinely. Within the past decade the literature is replete with articles advocating the routine performance of total hysterectomy whenever the uterus is removed for benign disease. I prefer to remove the cervix when benign disease of that part of the uterus makes it desirable to eradicate it. I also prefer to remove the normal cervix when doing a hysterectomy as prophylaxis against cancer. But I do not believe in doing anything in surgery as a fixed routine. No matter how skillful the surgeon may be, there is no denying the fact that a total hysterectomy is a greater surgical procedure than a subtotal operation. In some very complicated cases the removal of the cervix adds greatly to the operative risk. In the hands of less experienced surgeons, injury to the bladder and ureter is much more common with the total operation. Some advocates of total hysterectomy attempt to show by statistics that the total operation carries less mortality and morbidity than the subtotal. Such statistics taken from clinics of men doing a preponderance of total hysterectomies do not impress me. One must consider how such statistics are obtained. In those clinics the operator starts the operation with the intent of doing a total hysterectomy. Only when the procedure becomes complicated or when the patient's condition becomes serious does he decide to terminate the operation rapidly with a subtotal operation. Since the subtotal group contains a preponderance of such cases, it is natural that the mortality and morbidity would exceed that of the total group. One has only to observe the recent increased incidence of operative vesico-vaginal fistulas to be apprised of one result of the more general use of the total operation.

From the earliest days of surgery for carcinoma of the corpus, it has been apparent that a high per-

centage of cures may be had by hysterectomy combined with bilateral salpingo-oophorectomy. Within the past decade, however, it has been quite well established that a combination of irradiation and operation will cure a higher percentage of the cases than either procedure alone.

A discussion of hysterectomy would not be complete today without a consideration of cervical carcinoma. Ten years ago the question of the treatment of cervical cancer was thought to be settled in favor of irradiation. Within the last decade, however, there has been a renewed interest in the Wertheim operation. It was thought by some to be worthy of a re-evaluation in view of the improvement in surgical technique, the more general use of intravenous fluids, plasma and whole blood and the availability of chemotherapy and antibiotics. Experiments in the treatment of cervical cancer with the radical operation of Wertheim are being carried out in a few clinics in this country, but we should not forget that they are experiments. The operation is being done only on cervical carcinomas falling into stage I and selected early stage II (League of Nations) and only on thin women. It is as yet too early to learn the percentage of five-year salvage on a sufficiently large group of cases treated in this manner to be of statistical significance. While awaiting this answer, we should not lose sight of the fact that statistics up to the present time indicate that irradiation is the treatment of choice for cervical cancer. Should the results of the present experiment with surgery indicate its superiority over irradiation, let us recall that it will influence the treatment of only a small selected group of early cases in women who are preferred operative risks.

The knowledge that surgery is again being tried for cervical cancer has been received by many as the "green light" to proceed with hysterectomy in treating this disease. Unfortunately many of these operators are entirely unfamiliar with the technique of the Wertheim operation, and the operation done is little more than an ordinary total hysterectomy. Such incomplete surgery can only result in an increased, rather than decreased, mortality from this most serious of pelvic diseases.

There is a very special type of cervical cancer in which hysterectomy is indicated. I refer to carcinoma *in situ*. When this subclinical lesion is discovered on biopsy, and the cervix so nearly approaches normal in appearance that the diagnosis

(Continued on Page 842)



# Amebiasis and Its Complications

## *Diagnosis and Treatment*

By H. J. Kullman, M.D., F.A.C.P.

Dearborn, Michigan

IT IS IMPOSSIBLE to conjecture the incidence of amebiasis existing in the United States in this postwar era. Physicians in this temperate climate should necessarily be aware of its existence in returned military personnel of World War II. Military operations, especially in numerous tropical areas, resulted in the acquisition of one or more intestinal infections by large numbers of our troops. The diagnosis and treatment of amebiasis and its complications was a problem for medical officers in combat due to the large number of unsanitated areas contacted. Terrain previously occupied by enemy troops and natives, both of whom had a high incidence of amebiasis, frequently was watery and muddy. This soil, either in the rice paddies, foxholes or slit trenches contained the infected feces of the Japanese or natives and provided the necessary medium for contaminating hands, food or mess equipment of our troops.

Many of the military personnel have been treated during the course of active duty or at the time of separation from service. Today every physician and surgeon should carefully consider amebiasis and its complications, as the recurrence rate of this disease is high when not adequately treated. In addition, there are former military personnel harboring amebas unknowingly who may develop complications years after the original infestation. It is imperative that all physicians diligently seek the ameba, adequately treat the disease when found, and also bear in mind the necessity of careful follow-up before assuring the patient about cure. Awareness of the possible existence and adequate therapy when found will aid in the reduction of complications such as latent amebic hepatic abscess, noted by Galloway<sup>4</sup> as

occurring as late as twenty, thirty, and forty-three years after acute dysenteric symptoms.

The liver, lungs and pleura are relatively common sites of extraintestinal secondary amebic infection; involvement of the brain and skin occurs much more infrequently; and while cases of amebic involvement of the spleen, genitourinary system, gall bladder, bone and pericardium have been reported, according to Akenhead,<sup>1</sup> they are sufficiently rare to relegate them to the field of medical curiosities rather than practical clinical entities.

Hepatic amebiasis, also called amebic hepatitis, and amebic abscess of the liver are by far the most common complications of intestinal amebiasis. It has been estimated that hepatic complication occurs in 5 per cent of cases having intestinal amebiasis. The hepatic complication may develop during, immediately after, or years after the acute intestinal manifestations of amebiasis. It is not unusual for the hepatic complication to represent the first indication of the existence of amebiasis. About one-half of all cases of the hepatic complication are first recognized in the absence of dysentery, history of dysentery or positive evidence of amebas in the stools.

Immunity that the carrier harboring *Endamoeba histolytica* retains for a long period of time is occasionally suddenly lost. What "sets off" the process nobody knows; however, intercurrent infection, dietary indiscretion, acute alcoholism plus lack of adequate diet and surgical trauma have been known to be exciting causes preceding complications developing. Chapman, Schwartz and Haislip,<sup>2</sup> recently reported an instance of chills and fever in a returned soldier, believed by himself to be malaria. The illness followed an acute alcoholic binge with complete neglect of diet. Amebiasis was not suspected, and the soldier came to necropsy. The postmortem examination revealed the existence of amebiasis with multiple liver abscesses, multiple lung abscesses, perforations of the gall bladder and duodenum, with one abscess cavity replacing the superior anterior cortex of the right kidney. Robertson<sup>3</sup> reported the complications of amebiasis resulting from the surgical trauma of a cholecystectomy for cholelithiasis. Four days postoperatively the patient developed diarrhea, temperature, icterus and abdominal muscle rigidity. The incision was reopened, and sanguinous fluid, an inflamed colon and pericolic tissues

Chief of Medical Service, Veterans Administration Hospital, Dearborn, Michigan. From the Department of Internal Medicine, Wayne University College of Medicine, Detroit, Michigan.

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were encountered. The friable colon was accidentally opened, and the escaping fecal current paved the way to the diagnosis. Amebas were discovered on immediate microscopic examination. A stormy course followed but recovery resulted with use of emetine therapy. Walters, Watkins, Butt and Marshall<sup>12</sup> emphasize the problem of amebiasis and its complications in reporting two cases of hepatic involvement with spontaneous rupture into the right pleural cavity—unsuspected in these patients hospitalized for other conditions. The high mortality rate in the Chicago epidemic of 1933 and the complications incident to those infected who came to operation should continue to make all of us aware of amebiasis in this postwar era, consider it in differential diagnosis, seek out carriers with or without mild symptoms, and intelligently treat them when found.

### Diagnosis

The diagnosis of amebiasis when physicians are not attracted by an epidemic is often difficult to establish, and in general the index of suspicion is not high. Intestinal amebiasis may be asymptomatic or mild in its ability to produce symptoms. Cases of a moderate degree may produce mild variations of bowel habit with occasional bouts of mild diarrhea or loose stools, at times aggravated by alcohol indulgence. Still more severe forms, with heavy infestation of the parasite, may simulate chronic idiopathic ulcerative colitis, result in marked weight loss, blood in stools, anemia and abdominal crampy pain. Some of these severe forms with dysenteric symptoms represent parasitic relapses following inadequate therapy or poor follow-up, as evidenced in Case 5.

Success in arrival at the correct diagnosis involves the following:

1. A careful history regards areas where the returned veteran may have been exposed. Frequent sites where amebiasis may have been acquired, other than areas in the United States, are the China-Burma-India theatre of operations, Philippine Islands, Southwest Pacific islands and the Marianas Islands. The past history of having received specific treatment for amebic dysentery calls for careful investigation, as recurrence does occur. Poor response to anti-malarial therapy and frequent recurrence of so-called malaria with negative malarial blood smears may be important facts in the history of an individual having amebiasis.

Also atypical hepatitis with recurrence of an enlarged, tender liver should cause suspicion. Certain cases coming to my attention have been individuals who remained chronically underweight or were labeled as having psychoneurosis with gastrointestinal manifestations.

2. Physical examination in uncomplicated intestinal amebiasis may be entirely negative. Cecal tenderness may be a solitary finding. The latter finding in a patient having had an appendectomy for recurrent appendicitis should lead to strong suspicion.

3. Proctosigmoidoscopic examination, either after cleansing enemata or after the emetine provocative test. Immediate microscopic examination of mucus, material obtained from swabbing or the teasing of ulcerations. Use of warm saline on the slide or the use of the warm stage on the microscope is helpful. Ulcerations in the rectum are not always of the textbook type with shaggy edges and a necrotic base. This stage is an advanced amebic ulcer, probably having secondary invading organisms. The ameba likes to hide under either the edges of the ulcers or in and about capillaries or lymphatic spaces in the surrounding submucosa. Early stages of amebic ulcers are represented by pinhead-sized, slightly raised, hyperemic nodules which later develop superficial ulceration centrally.

At this point it must be remembered that serious lesions in the colon may exist without causing symptoms. Several investigators, prior to Faust's study reported in 1941, have reported amebas in sections of intestinal mucosa without ulceration. They were located in the submucosal stroma, lymph follicles, lymph nodes and blood vessels of the submucosa. Faust's study was on 202 persons accidentally killed in New Orleans, and 6.44 per cent had demonstrable amebas in the tissues without evidence of tissue necrosis or ulceration. When this phenomenon exists, either the strain of ameba is of low degree of pathogenicity or great resistance exists on the part of the host.

4. Stool examinations. Single repeated warm stools may prove satisfactory. I have always felt that the warm liquid stool following saline purgation which represents the sweepings from the entire colon is more satisfactory. Collection of the samples from the second, third and fourth evacuations should be examined as soon as possible.

5. The emetine provocative test. Hill<sup>5</sup> in 1947 reported on the use of this test as a laboratory aid



in the diagnosis of amebiasis. This test may be accomplished in either of two ways. Emetine hydrochloride, grains 1, is given intramuscularly in the evening preceding the test, usually at 8:00 p.m. A saline purgative may be given in the morning following and the first, second, and third stools examined, or the saline purge may be given at midnight, with two saline enemata given the following morning, one and one-half hours preceding sigmoidoscopy. The terminal portions of the evacuated enema, plus specimens obtained at sigmoidoscopy, are then examined microscopically.

6. The complement fixation test. This test appears to be of little value in the diagnosis of uncomplicated intestinal amebiasis except in heavy infestation.

7. Barium enema examination. The *Endamoeba histolytica* favors residence in the cecum in addition to the rectum or other locations in the colon. Amebic cecitis may be demonstrated by this examination usually with positive stool examinations but may occur without demonstrable ulcerations in the rectum or sigmoid colon.

8. Stool culture. Many investigators have used culture of the stool, and it has proven satisfactory. Where only one specimen is to be examined, as in a survey of food handlers or in office practice, this method is highly desirable. In cyst passers, where only an occasional cyst is found, the culture technique may result in more conclusive results. Craig also believes that none of the non-pathogenic amebas, as *Endamoeba coli*, *Endolimax nana*, or *Iodamoeba bütschlii*, grow as easily in cultures as *Endamoeba histolytica* nor can they be maintained indefinitely as can the latter organism.

*The Diagnosis of Complications.*—The early recognition of hepatic involvement is often most difficult but is of paramount importance, as proper treatment will prevent the formation of abscess or abscesses. One should aim to diagnose the hepatic complication in the "pres-suppurative stage," which would be better called hepatic amebiasis rather than a term frequently used in the literature, namely, amebic hepatitis. Clinically the onset may be sudden in the acute form or gradual in the chronic low-grade stage. Elsom, Rogers and Wood,<sup>3</sup> describing their experiences during World War II in an Army Hospital in India diagnosed amebic liver involvement in thirty cases. In fifteen the hepatic involvement was the first indication

that the patient had amebic infestation; in the other fifteen hepatic involvement occurred during the course of dysenteric symptoms. The symptomatology may be variable, but in the acute form pain may be severe either over the liver area or below the costal margin. It may also assume a pleuritic character out in the axillary line and at times be referred to the right shoulder if the diaphragm is involved or pushed upward by right liver lobe bulging. The liver may be palpably enlarged, tender and accompanied by abdominal wall muscle spasm. Febrile attacks, with or without chills followed by profuse sweating, may occur. One of the most frequent mistakes made in the diagnosis of amebic liver abscess is that malaria has been diagnosed. This can easily be differentiated by examination of multiple blood smears. Loss of appetite, malaise, weight loss and disturbed slumber so frequently accompany the chronic form of liver involvement.

Physical signs are usually dependent on the duration of the disease. The liver is usually enlarged upward (Cases 1 and 2) in right lobe involvement. Signs of diminished or absent excursion of the right diaphragm may be found. Compression tenderness of the lower rib cage, as well as right costovertebral angle tenderness, may be demonstrated. If multiple lobe or chiefly left lobe involvement is headlining the process, a tender epigastric mass may present itself or, as in Case 3, the left diaphragm with pleuritis and pleuro-pericarditis may be found on physical examination. Jaundice is usually absent, and liver function tests of little or no value. Leukocytosis is usually 15,000 to 30,000 in the acute forms but may be only slightly elevated or normal in chronic stages. Stool examinations and proctoscopic examination are too often not helpful as an aid in diagnosis. Payne, Gabenhaus, and Pfanner<sup>8</sup> state negative stool examinations are common with hepatic amebic infection in their series. Sodeman and Lewis<sup>11</sup> warn if one waits until the criteria for diagnosis are absolutely fulfilled, great hazard is added to the life of the patient and potential benefits from treatment are greatly reduced. Snell<sup>10</sup> states, "For every case in which the diagnosis is made by finding *Endamoeba histolytica* in the stool, there is one in which the diagnosis is made by observing the therapeutic effect of emetine."

The roentgen examination in the diagnosis of amebiasis and its complications may be helpful.

One is limited to the indirect signs with the hepatic complication. These are present frequently when liver abscess formation has occurred. Fluoroscopic examination with the patient upright may show fixation, restriction or bulging upward into the right lower lung field. In far-advanced cases, pleuropulmonary signs may also be present. Ikeda<sup>6</sup> found x-ray findings in amebiasis varied with the stage of the infection, the extent and degree of the lesions, and the type of the lesions, whether ulcerative, fibrous or granulomatous. In his experience no appreciable changes from normal were noted in the colon in the early stages of the infection. Later, fine saw-tooth projections along the wall of the colon are observed, and still later, fine feathery or thorny filling defects are seen. He also observed a somewhat characteristic deformity of the cecum and ascending colon during the subacute or early chronic stage, when there may be apparent shortening or contraction of the wall with induration and filling defects.

The complement fixation is not practical for routine use, as commercial antigen has not been prepared in quantity and quality for general use. It should not be used to exclusion of stool examinations, either by direct or cultural methods. It is usually negative in intestinal amebiasis unless the infestation be heavy and of long standing. It may give support in chronic extra-intestinal amebiasis where stool examinations are negative, as in Cases 3 and 4.

### Treatment

The treatment of intestinal amebiasis and extra-intestinal complications should be vigorous and be directed toward the entire elimination of this infection, no matter how mild the manifestations. Asymptomatic carriers are a menace to public health, and there is no such thing as a "healthy carrier" of this parasite. It should be understood that at present we possess no single drug or method of treatment which will eliminate infection with *Endamoeba histolytica* in every case. Most physicians do not appreciate the high recurrence rate when treatment consists of emetine alone. Many writers have called attention to this fact, and some report recurrence or relapse in as high as 81 per cent of cases.

*Symptomless Carriers and Mild Forms of Intestinal Amebiasis.*—Iodine preparations, namely, chiniofon and diodoquin, have been found most

efficacious in treating such cases. It is not practical to use a drug so toxic as emetine and require a patient to be at bed rest while treatment is being carried out. If diodoquin is used, two tablets three times daily for a period of three weeks should be adequate. Tablets contain 3.2 grains of the drug. If infection is not eliminated, a one-week course of carbasone may be given; 0.25 gram may be given three times daily after meals. Follow-up studies should include the examination of a stool once a month for three months. Alcohol in any form should be avoided during treatment.

*Acute and Chronic Intestinal Amebiasis with Dysenteric symptoms.*—Emetine hydrochloride, grain 1, intramuscularly daily, frequently controls the dysenteric symptoms in the acute phase or the chronic case having parasitic relapse. Treatment for seven days may be adequate, and never more than a total of ten doses should be given during a course. To avoid untoward side effects and the development of toxic symptoms, bed rest should be complete. Electrocardiographic studies should be accomplished before treatment, on the fourth day, the seventh day and during the week following completion of a course of emetine.

Following control of dysenteric symptoms, a course of diodoquin for three weeks is recommended. Three tablets (3.2 grains per tablet) are given three times daily during this period. A one-week course of carbarsone may be necessary if stools are still positive. The latter treatment can be carried out with the patient ambulatory. Stool examinations once weekly for three weeks and once monthly for three months should be done before patient is considered cured. Examples of parasitic relapse are Cases 1, 5 and 8. When oral therapy is interfered with for any reason, such as the pyloric obstruction in Case 8, iodine therapy may be given in the form of nightly retention enema, using 200 c.c. of a 2 per cent solution of chiniofon.

In patients who have suffered many relapses of amebic dysentery, covering several years, the prospect of cure with any method of treatment now available is poor, and even if the infection is eliminated, the patient may continue to have attacks of diarrhea if extensive ulcerations have occurred in the intestine, resulting in the replacement of large areas of the mucous membrane by scar tissue. Bowel physiology may be so altered



that fluid absorption may be interfered with. These individuals should guard against taking excessive amounts of fluid, so frequently done in summer months.

*Complications.*—Evidence exists in the literature that hepatic amebiasis and amebic liver abscess may be cured by medical treatment alone. If aspiration or surgical drainage is considered in the presence of bulging in the region of the liver, fluctuation or impending rupture through the diaphragm, it is imperative that a complete course of emetine be given over a period of ten days. If possible, the course should be completed before aspiration or drainage. The high incidence of multiple lobe involvement is another important reason for complete medical follow-up should surgical treatment be instituted. Case 1 is an example of recurrent hepatic amebiasis following surgical drainage many months before. No medical follow-up resulted in recurrent pain, temperature, leukocytosis, elevated diaphragm and evidence of trophozoites in the stool. This patient was successfully treated without aspiration or surgical drainage. Case 2 demonstrates successful medical treatment of probable amebic liver abscess without aspiration or surgical drainage. If secondary invading organisms are present, medical therapy should include the use of penicillin or possibly streptomycin if the organism can be recovered from aspirated material. Ochsner and DeBakey<sup>7</sup> in 1943 reported on eighty cases of liver abscess where open drainage had been employed. The mortality was 22.1 per cent as compared with a mortality of 3.6 per cent in a series of eighty-three cases treated by emetine and aspiration.

The medical treatment with hepatic amebiasis or abscess should not be limited to the employment of emetine alone, but attention should be given the intestinal phase and the use of one of the iodine preparations. Caution should be exercised in the use of the arsenical carbarsone in the cases having extensive hepatic involvement.

*Other Complications.*—Complications such as amebic abscess of the lung or brain require surgical drainage in addition to emetine therapy. Occasionally medical therapy in lung abscess suffices.

Pericolic or appendiceal abscesses may occur and require surgical drainage in addition to emetine.

Appendicitis may be easily confused, and when amebic involvement of the appendix occurs, cecal amebic involvement is always present. Case 5 recovered from an appendectomy before the diagnosis of amebiasis had been established. Case 9 had symptoms suggestive of recurrent appendicitis, and operation had been recommended prior to hospitalization. The barium study of the colon failed to show cecal changes, and trophozoites found in the stool were eliminated. To date no recurrence of symptoms has occurred.

Recognition in recent years of the widespread existence, plus the World War II experiences by many medical officers, has led to the more frequent diagnosis of this infection and proper treatment in the temperate zone.

*Case 1.*—*Hepatic amebiasis, recurrent, following surgical drainage of liver abscess.* H. A., a thirty-two-year-old white veteran, was discharged from the military service on October 23, 1945. He had not been overseas, and duty in the U. S. was in Florida, Texas, Arkansas and Virginia.

He had not been hospitalized during service and had only one bout of diarrhea lasting three days. He remained well until eight weeks before admission to another local hospital in May, 1946. He complained of pain in the right upper abdomen, weight loss, anorexia and fever at that time. Surgical drainage of a liver abscess was accomplished, followed by emetine and penicillin therapy. No stool examinations were made following recovery or discharge from the hospital.

The patient was admitted to the Veterans Administration Hospital, Dearborn, Michigan, November 10, 1947, having been well until six days before admission. He complained of intermittent pain over the liver area, aggravated by deep inspiration, change of position or jolting. Symptoms persisted with chilliness, anorexia and malaise until admission. He had no diarrhea or respiratory infection and had worked steadily in a motor manufacturing plant.

Physical examination revealed an acutely ill male of moderately good nutrition. No jaundice was apparent. Temperature was 101° and the respiratory excursion was diminished on the right. Elevation of the right diaphragm with marked limitation on respiration was found. Compression tenderness over the lower ribs was present. The liver was enlarged to two fingerbreadths below the costal margin and was moderately tender. A well-healed 3-inch scar was present, paralleling the costal margin. Roentgen examination revealed elevation of the right diaphragm, with marked limitation of movement on fluoroscopic examination. Hemoglobin was 14.5 grams, leukocytes were 14,950, with 74 per cent neutrophils and no eosinophils, and sedimentation rate was 25 mm. The proctosigmoidoscopic examination was negative for ulcerations, but direct swabbing of the mucosa, followed by microscopic examination, revealed

numerous motile trophozoites of *Endamoeba histolytica*. The complement fixation test for amebiasis was positive. Serum bilirubin was 0.5 mg. per cent, and other liver function tests were within normal limits.

The present illness began in January, 1946, with periodic chills and fever believed by himself to be malaria and he used various home remedies for same. At no time was malaria proven by blood smear. Appe-

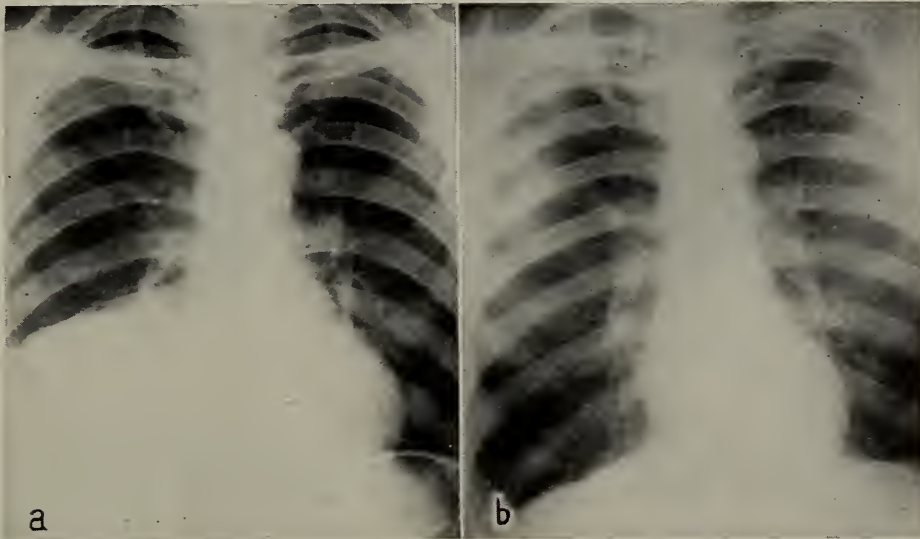


Fig. 1. Case 2. (a) June 20, 1946. Before amebicide therapy. (b) October 16, 1947. Final chest x-ray after two courses of emetine without aspiration.

Clinical course: The patient was placed on emetine hydrochloride, grain 1, intramuscularly daily, with relief of symptoms after the fourth day. He continued to have a low grade temperature and leukocytosis. Emetine therapy was discontinued after the eighth dose as T waves became inverted. He was given diodoquin orally, grains 9.6 three times daily, which resulted in the temperature becoming entirely normal and leukocytes dropping to 8,000 and sedimentation rate to 10 mm. The stools were negative, but the complement fixation test remained positive. The electrocardiogram was normal before his discharge January 19, 1948. No attempt at aspiration or surgical drainage was made during the course of treatment. Because of the seriousness of this lesion, recurrence following one surgical drainage and persistent positive complement fixation test for amebiasis, readmission was recommended at a later date. Accordingly, he was readmitted June 28, 1948, and discharged July 15, 1948. Recheck during this admission revealed negative stool examinations and proctoscopic examination. The diaphragm movement had returned to normal. Hemoglobin was 14.5 grams per cent, red cells 4,720,000, leukocytes 8,800, with 51 per cent neutrophils. A course of emetine therapy was repeated while the patient was at complete bed rest. He has returned to his former occupation, feels well but persists in having a positive complement fixation test for amebiasis.

*Case 2.—Hepatic amebiasis with pleuritis and right shoulder pain.* M. M., aged forty, a colored male, had been discharged December 2, 1945, in good health after serving in North Africa, Italy, and the Philippine Islands. He had never experienced diarrhea during his military service.

tite was poor, weight declined 20 pounds, and weakness forced him to give up his work as a moulder, and he was admitted to the hospital May 18, 1946.

The physical examination revealed dullness at the right lung base with limited respiratory excursion. Tenderness in the right upper abdomen was diffuse, and the liver edge could not be definitely palpated.

X-ray examination revealed marked elevation of the right diaphragm without localized bulging or tenting. Mild pleuritic reaction was evident with obliteration of the costophrenic sulcus. Fluoroscopic study showed fixation of the right diaphragm. Laboratory examination revealed a leukocytosis of 22,000 with 72 per cent neutrophils, sedimentation rate of 33 mm. in 60 minutes and a hemoglobin of 10 grams per cent. Brom-sulfalein excretion, cephalin flocculation test, serum bilirubin, serum proteins, albumin-globulin ratio, repeated blood smears for malaria, repeated stool examinations, agglutination tests for undulant fever and the typhoid group were all within normal limits or negative. The proctosigmoidoscopic examination failed to demonstrate ulcers, and direct smears from the mucosa were negative for trophozoites or cysts.

Clinical course: Following surgical consultation it was agreed that the criteria met had not satisfactorily fulfilled the justification of a diagnosis of hepatic amebiasis or abscess; a therapeutic trial was indicated, and if no response resulted aspirations would be done. Temperature, which had swings to 101°-102°, regressed after the second day of emetine therapy. Muscle spasm and tenderness in the right upper quadrant disappeared. After 8 grains of emetine, T wave changes occurred, and the drug was discontinued. Oral therapy with diodoquin was given for two weeks while the patient



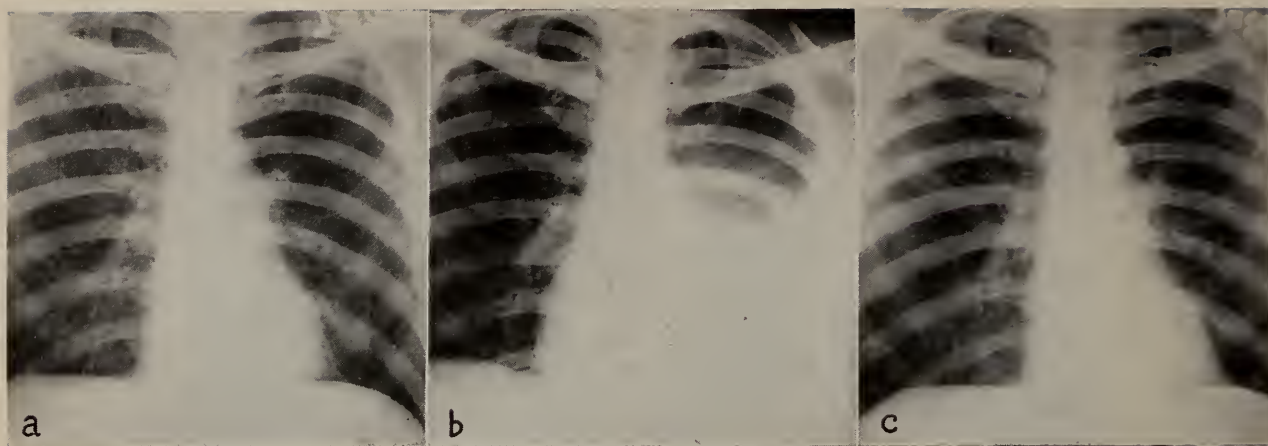


Fig. 2. Case 3. (a) October 15, 1947. Admission x-ray. (b) November 10, 1947. Acute pleuritis and pleuropericarditis before amebicides. (c) February 5, 1948. Chest x-ray after penicillin and amebicides.

was on therapeutic leave from the hospital. A repeat course of emetine therapy was indicated, as residual leukocytosis, an elevated sedimentation rate and limited excursion of the diaphragm persisted. Electrocardiographic changes regressed before a repeat course of 10 grains of emetine was given. Leukocytes were 8,900 and sedimentation rate was 10 mm. following repeat therapy. A careful follow-up was maintained, and the final chest x-ray and fluoroscopic examinations were negative. No attempts were made to aspirate the liver.

*Case 3.—Hepatic amebiasis with acute pleuritis, left, and pleuropericarditis.* H. C. L., a thirty-year-old white male veteran, was discharged from military service January 13, 1947, in good health after having served overseas in the Marianas Islands.

He was admitted to the Veterans Administration Hospital, Dearborn, Michigan, October 15, 1947, stating he had back pain (left), loss of appetite, and his weight had declined 29 pounds in the previous five weeks. During the preceding week the pain had been localized over the left renal area, and his local physician had treated him with penicillin and sulfonamide. He was told that he probably had a perinephric abscess.

The past history included a bout of fever in April, 1947, when he was confined to bed for three days. Temperature reached 103°. He subsequently returned to his truck driving.

On admission, the physical examination was essentially negative except for temperature of 101° and left costovertebral angle tenderness. The chest x-ray was negative. Leukocytosis was 22,000, with 62 segmented and 12 unsegmented neutrophils.

The clinical course was most interesting. Penicillin therapy failed. Search for amebas on repeated stool examinations was negative. The sigmoidoscopic examination was negative. On November 12, 1947, chest x-ray revealed fluid in the left pleural space and what appeared to be localized increased density in the left diaphragm. The patient continued to complain of severe back pain. A therapeutic trial of emetine hydrochloride, grain 1 daily, was given for five days. The

renal pain continued, pleural aspiration revealed clear fluid and a pleuropericardial friction rub was present. On November 17, 1947, the perirenal area was explored. The kidney itself was not involved, but superior to the kidney an indurated area could be palpated. Aspiration of this localized area resulted in obtaining yellowish thick material which on direct examination was negative for ameba and on culture showed *Staphylococcus aureus*. The complement fixation test for amebiasis was reported as positive following operation. Emetine therapy was reinstituted, and a total of 12 grains given in one course. This was followed by diodoquin orally for three weeks. The effusion cleared and the patient became afebrile. A residual leukocytosis of 13,000 was present, and the patient was given a convalescent leave. On return, a second course of 10 grains of emetine was given. The patient was discharged February 5, 1948, after having regained weight and the complement fixation test had reversed itself to negative. A final chest x-ray on date of discharge was essentially negative.

*Case 4.—Amebiasis, intestinal, with localized ulcerative colitis in transverse colon.* R. W. L., a thirty-six-year-old white male veteran, was discharged from the armed forces in June, 1944, following the development of diarrhea, multiple joint pains and a 40-pound weight loss which began in December, 1943. He had never been overseas but had a tour of duty in and about New Orleans, and was also a native of Tennessee prior to World War II.

He was admitted to the hospital May 11, 1948, because of increase in severity of diarrhea which had been sporadic and without blood, mucus or pus. Stools varied from mushy to watery and frequently contained undigested food. Fifteen minutes after eating a meal he occasionally had crampy abdominal pain, not localizable. Three weeks prior to admission the flare-up became so severe that he gave up his employment.

The physical examination was not remarkable except for slight tenderness across the upper abdomen, and the patient appeared somewhat undernourished. Some tender internal hemorrhoids were present. This was cor-

roborated on proctoscopic examination. The rectal mucosa appeared normal. Laboratory examinations included hemoglobin of 14 grams per cent, leukocytes 10,150 per cu. mm. with a normal differential count, negative blood Kahn test, negative urinalysis, and culture of the stool was negative for enteric pathogens. Repeated stools were negative for trophozoites or cysts. The complement fixation test was strongly positive for amebiasis.

X-ray studies of the barium-filled colon revealed an extensive ragged area in the transverse colon, apparently involved in an ulcerative process. The colon retained its ability to be distended in this area, and no apparent shortening existed.

The clinical course was characterized by daily elevations of temperature of 99° to 100°. Continued stool studies failed to reveal amebas. Emetine hydrochloride, grain 1, intramuscularly daily for ten days, was instituted following a report of a second strongly positive complement fixation test for amebiasis done at another laboratory. Temperature subsided immediately, the patient enjoyed a sense of well-being, diarrhea was reduced to three stools daily, eating improved and the patient gained weight. The patient remained hospitalized because of T wave changes in the electrocardiogram, which occurred on the fifth day following completion of emetine therapy. These changes reverted to normal in the fourth week. Diodoquin, grains 9.6, was given three times daily for three weeks, and carbarsone was also given orally for one week. The complement fixation test remained weakly positive, following one course of therapy. The patient was discharged August 5, 1948, was able to return to work, and it was recommended that he have a repeat course of therapy.

*Case 5.—Amebiasis, intestinal, recurrent, simulating chronic idiopathic ulcerative colitis. Appendectomy performed prior to establishing diagnosis of amebiasis.* C. S. A., a twenty-three-year-old white male veteran, was discharged from military service November 20, 1946, following duty in the Southwest Pacific theatre. Prior to overseas duty he was stationed in Texas.

This patient was admitted to the hospital February 17, 1948, with complaints of intermittent recurrent abdominal pain since July, 1945, periodic diarrhea with blood and a decline in weight of 22 pounds in the previous two months. Pain and diarrhea began in July, 1945, while in the Philippines. He was hospitalized for one month and improved. In September, 1945, he had recurrence of pain and diarrhea; again he was hospitalized, and following an observation period an appendectomy was done. Postoperatively he developed chills and fever and was given antimalarial therapy. It is not known if he had parasitemia demonstrated at that time. In January, 1946, he developed a recurrence of diffuse abdominal pain and diarrhea. He was hospitalized in a military hospital in the U. S. where a diagnosis of amebic dysentery was established and a course of seven injections given. He remained comparatively well until April, 1947, when he had mild pain and some bright blood in his stool, and later, periodic diarrhea which

progressed to the point where it was present 50 per cent of the time. Severity of pain, weight loss and weakness necessitated his giving up his employment in November, 1947. He had been proctoscoped on two occasions by physicians and told he had ulcerative colitis.

The physical examination revealed a tall, asthenic, undernourished, chronically ill, young male. There was diffuse marked tenderness through the abdomen, more marked in the upper quadrants. The liver could not be palpated, and no apparent increase in dullness was present. No compression tenderness was elicited over the lower right thorax. Proctosigmoidoscopic examination revealed many superficial ulcerations for a distance of 25 cm.; the mucosa was friable and bled easily. Direct smears showed a large number of motile trophozoites of *Endamoeba histolytica*. Laboratory examinations included a leukocyte count of 18,000 with 81 per cent neutrophils and hemoglobin of 11 grams per cent. Sedimentation rate was 25 mm. in 60 minutes. Kahn test was negative, and complement fixation test for amebiasis was strongly positive. The barium enema study showed irregularity of the cecum, fuzziness of bowel wall in the proximal transversus and at the splenic and sigmoid flexures. Haustral markings were preserved, the colon was distensible throughout and no apparent shortening was present.

Clinical course: The patient had considerable abdominal pain day and night, requiring opiate for relief, but remained afebrile. Amebicide therapy was instituted, using diodoquin first. Diarrhea improved, and general improvement occurred after the first week. A ten-day course of emetine hydrochloride was followed by a one-week course of carbarsone. Stools became negative for trophozoites or cysts. The complement fixation test remained positive after one complete course of amebicide therapy. Because of previous recurrence following inadequate therapy, extensive colonic ulcerations and the high degree of infestation, a repeat course of emetine was given following a waiting period of three weeks. No electrocardiographic changes occurred during either course of emetine therapy. The patient was discharged from the hospital April 24, 1948, having gained 15 pounds, with normal rectal mucosa on proctoscopic examination, leukocyte count of 8,600, sedimentation rate of 3 mm., stools negative for amebas by direct examination and culture, and a weakly positive complement fixation test. It was recommended that he have monthly stool examinations for three months following his discharge.

*Case 6.—Amebiasis, intestinal, with localized, partially obstructing, inflammatory lesion of sigmoid colon.* J. H. H., a fifty-four-year-old white veteran of World War I, was admitted to the hospital December 15, 1947, complaining of lower abdominal pain, nausea and vomiting of three days' duration.

The past history included hospitalization at the age of twenty-three for unexplained fever. He recovered in three weeks and was never told the cause of the fever. During World War II he had been a Merchant Mariner in the Pacific and had gone ashore many times in the Philippine Islands.



The present illness began about ten days prior to admission when he sought relief of constipation by taking multiple cathartics with very little result. Three days before admission, diffuse crampy lower abdominal

although the lumen appeared broader and less irregular. Surgical consultation was requested, and it was believed that new growth could not be eliminated from consideration without exploration. The leukocyte count was 8,000

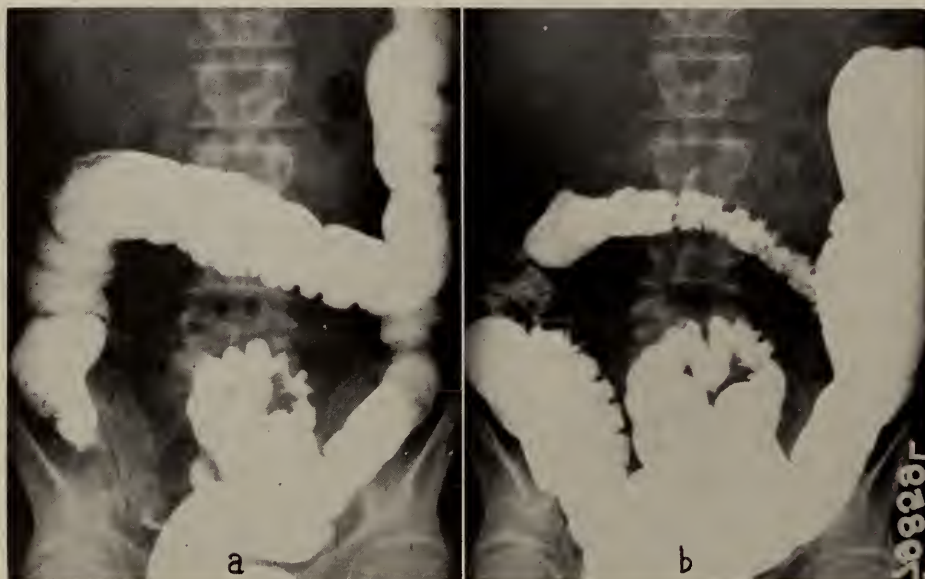


Fig. 3. Case 6. (a) December 20, 1947. Defect of sigmoid before amebicide therapy. (b) January 14, 1948. Improvement in defect following amebicides.

pain occurred and was associated with nausea and vomiting. He was not conscious of temperature but did have generalized arthralgia. Appetite was poor and he believed he had lost ten pounds recently. No diarrhea or blood in the stool had been noted.

The physical examination revealed a slightly undernourished male of stated age, appearing acutely ill. Temperature was 100°. Diffuse lower abdominal tenderness, slightly greater on the left, without muscle spasm, was noted. No distention was apparent. Laboratory examinations initially included a hemoglobin of 14 grams per cent, leukocytes 15,900 with 79 per cent neutrophils, sedimentation rate of 22 mm. (Westergren), serum albumin of 4.2 and serum globulin 1.8, negative Kahn test and urinalysis. The very first stool examination revealed motile trophozoites of *Endamoeba histolytica*. The rectosigmoidoscopic examination to 25 cm. revealed normal mucosa. Barium enema, done December 20, 1947, revealed a persistent defect in the sigmoid colon on fluoroscopy, and this was confirmed on examination of the films. This area appeared to be in the proximal sigmoid colon and on first examination was believed to be a neoplasm.

The clinical course was that of improvement after amebicides. Three days after starting emetine therapy he became afebrile. A ten-day course of emetine hydrochloride, grain 1, once daily, was given. Stools became negative after the emetine therapy. This was followed by a three-week course of diodoquin, grains 9.6 three times daily, while the patient was on convalescent leave. Re-examination of stools were negative for *Endamoeba histolytica*, and repeat examinations of the colon by barium enema showed the constricting defect persisting,

with 66 per cent neutrophils, and sedimentation rate had returned to 12 mm. following amebicide therapy. Exploratory laparotomy was done March 5, 1948, and the sigmoid was free of palpable intrinsic lesion. A few post-inflammatory adhesions were present between the sigmoid and the lateral peritoneal reflection. The patient recovered promptly and was discharged March 11, 1948.

*Case 7.—Amebic cecitis.* R. E. C., a twenty-five-year-old white male veteran, was discharged from the armed forces March 8, 1946, following four years of service. He spent one year in several southern states of the United States, was later sent to France, Belgium, Austria, and Germany. In 1945 he was sent to the Philippine Islands. He had been treated for amebic dysentery for only a period of five days while in the Philippines. Treatment consisted of injections and sulfonamide. He improved and had no recurrence of diarrhea until after his discharge from service in 1946. During the original episode he lost about 30 pounds, and this he never regained.

The chief complaint on admission July 11, 1948, was a bout of recurring diarrhea which began three days preceding entrance. Episodes of diarrhea lasting two to three days had occurred every two to three months during the preceding two years.

The physical examination revealed slight and variable tenderness over the cecum and ascending colon. A liver edge could be felt only at the end of deep inspiration. The laboratory examinations revealed a hemoglobin of 14 grams per cent, leukocytes 9,100 with 5 per cent eosinophiles. Repeated warm stools were negative for parasites or ova. The rectal mucosa was normal on

proctoscopic examination, and swabbings were negative. The provocative emetine test was negative. The barium enema study revealed good filling of the colon except for some irregularity and deformity of the cecum. This irregularity was noted during fluoroscopy, on the film and also following air contrast study.

It was concluded that the deformed ragged cecum represented the residual of amebic infection in this area. A course of amebicide was recommended, and the patient received daily intramuscular emetine hydrochloride, grain 1, for ten days, without reaction or electrocardiographic changes. This was followed by a leave from the hospital, during which time he was placed on carbarsone therapy for one week and a three-week course of diodoquin.

*Case 8.—Amebiasis, intestinal, in presence of pyloric obstruction due to ulcer, duodenal, chronic, recurrent.* F. H., a thirty-nine-year-old white male veteran, was discharged from the armed forces December 9, 1945, following seventeen months' service in the Pacific, including Leyte, Philippine Islands. He was admitted to the hospital November 7, 1947, complaining of nausea and vomiting of two months' duration, epigastric fullness, weight loss and weakness.

The past history was most interesting and important. In December, 1944, while on Leyte, he first complained of epigastric postprandial distress, relieved by food and fluid, with characteristic night pain coming on at 2:00 a.m. In January, 1945, he developed diarrhea and was hospitalized. Amebas were demonstrated in the stool, and he was treated with "pills" for a period of one week, being discharged at the end of that time by a medical officer on the basis of one negative stool examination. Recurrence of epigastric pain occurred in June, 1945, when he suffered a severe gastrointestinal hemorrhage characterized by vomiting of blood, melena and syncope. He was again hospitalized for sixty days and x-ray proof of duodenal ulcer obtained. He remained well and was discharged from service in December, 1945, on points. He continued to have recurrences of ulcerlike distress, constipation and periodic rectal bleeding, which were treated by a physician with diet and mineral oil. Rectal bleeding was attributed to "piles," and no investigations were made regarding stool examinations or proctoscopic examination.

The physical examination was not remarkable except for epigastric tenderness without muscle spasm. The hemoglobin was 13.5 grams per cent and leukocytes were 10,700 with a normal differential count. Gastric acids were elevated to 100° of free HCl. Fasting and nightly aspirations revealed 700 to 1200 c.c. of gastric retention. The initial stool examination was positive for motile trophozoites of *Endamoeba histolytica*, and the proctoscopic examination was negative for ulcerations. X-ray examinations revealed a duodenal deformity with crater and marked spasm, with 70 per cent retention at six hours. The complement fixation test for amebiasis was positive.

The patient did not respond to medical treatment of his gastric retention. Emetine hydrochloride, grain 1

intramuscularly for ten days, and diodoquin, grains 9.6 only three times daily for three weeks, were given. To insure adequate iodine amebicide therapy, a nightly retention enema of 200 c.c. of 2 per cent chiniofon was also given. Stools became negative and the complement fixation test became negative.

Following adequate preoperative preparation, subtotal gastrectomy was accomplished February 2, 1948. The duodenum was found adherent to the gall bladder and liver as a result of old perforation. A biopsy of the liver failed to show evidence of amebas in the tissue; however the pathologist reported grade 1 periportal connective tissue increase. The patient was discharged from the hospital February 17, 1948, having had an uneventful postoperative course.

*Case 9.—Amebiasis, intestinal, simulating recurrent appendicitis.* C. G., a twenty-seven-year-old white male veteran, was discharged from military service June 10, 1945, following five years of military service. Overseas duty included service in Africa and Italy.

On July 19, 1948, the patient was admitted to the hospital following recurring bouts of lower abdominal pain and right lower quadrant soreness. Occasional loose bowel movement had been noted but never diarrhea. Appendectomy and repair of relaxed inguinal rings had been previously recommended by a physician. One week prior to his admission he had suffered his most severe attack, with associated nausea and vomiting lasting for three days. A decline in weight had occurred, from 157 pounds to 147 pounds.

Physical examination on admission revealed a temperature of 99.2°, tenderness on deep palpation over the cecum without spasm or rebound tenderness, and enlarged external inguinal rings transmitting impulses on the left side, when coughing.

Laboratory examinations included a negative photo-roentgen examination of the chest, and an admission leukocyte count of 13,350 per cu. mm., with 67 per cent neutrophils, 25 per cent lymphocytes, 4 per cent monocytes, 2 per cent basophiles, and 2 per cent eosinophiles. The urinalysis was negative, Kahn test negative and the cholecystogram was negative. The barium enema study was negative. Two stool examinations on separate days revealed motile trophozoites of *Endamoeba histolytica*. Proctosigmoidoscopic failed to demonstrate evidence of ulceration.

*Clinical course:* The patient had slight daily elevation of temperature of 99.2° to 99.4° until the fourth day of emetine hydrochloride therapy. The temperature remained normal thereafter. He received a total of 10 grains of emetine. The leukocyte count varied from 17,600 to 13,350 before therapy. It returned to 10,150 with 53 per cent neutrophils after therapy. No electrocardiographic changes were observed during emetine therapy. He was discharged from the hospital August 12, 1948, on ambulant therapy, including a three-week course of diodoquin and a week course of carbarsone. It was recommended that he have stool examinations weekly for three weeks, then one a month for three months after completing therapy.



## Summary

Evidence has been presented that amebiasis exists in Michigan following World War II. Military personnel who have returned from areas overseas where amebiasis is known to exist, and also people who have traveled extensively in southern states in the United States, must be considered as potential candidates harboring *Endamoeba histolytica*. Acute dysenteric symptoms are not a prerequisite in establishing suspicion, as 50 per cent of patients having complications of amebiasis give no history of having had acute amebic dysentery.

Every physician should diligently seek and adequately treat amebiasis when found. Cases reported demonstrate evidence of inadequate follow-up examinations resulting in parasitic relapse and probable irreversible changes in the colon. Recurrence when emetine alone is used in amebicide therapy has been known to occur in a high percentage of cases.

Hepatic amebiasis may be successfully treated medically without resorting to aspiration or surgical drainage. Multiple lobe involvement when the hepatic complication is present exists more frequently than previously thought. Should surgical aspiration be deemed necessary, the administration of emetine before this form of treatment is imperative. Stool examinations in the presence of the hepatic complication are notoriously negative.

Returned military personnel having unexplained weight loss and mild gastrointestinal symptoms, unexplained fever or leukocytosis, or periodic change in bowel habit should be investigated for amebiasis. Another group where the index of suspicion should be high are the recurrent malaria patients and also those having symptoms of recurrent hepatitis. Surgeons are particularly confronted with the problem when symptomatology of the patient is that of recurrent pain in the right lower quadrant. The neurotic patient with gastrointestinal manifestations should also be investigated thoroughly.

The more frequent use of the stool examination by both direct microscopic study and culture and the generous use of the proctoscope to visualize the rectal mucosa and to obtain specimens for microscopic examination will undoubtedly lead to a more frequent diagnosis of amebiasis and its complications.

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MSMS

## HYSTERECTOMY

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of malignancy cannot be seriously suspected, it can be cured by a modified Wertheim hysterectomy without gland dissection. I believe there is justification for this statement in our experience in operating upon sixty-seven of these cases in the past eight years, without recurrence in a single one.

Finally, what will be the effect of the great number of vaginal smears taken in offices and detection centers upon the incidence of unjustifiable hysterectomy? I am afraid it will be substantially increased. I have already encountered patients who have been incorrectly advised to have hysterectomy on the basis of a positive vaginal smear alone. In the hands of expert cytologists the percentage of over-all error is about 4 per cent. But one must not lose sight of the fact that the percentage of false negatives is much greater in the presence of uterine cancer. To cite but two examples, this percentage of error reported by Fremont-Smith and Graham was 10.3 and by Scheffey 30. These figures should impress us with the necessity of withholding treatment until the positive smear is confirmed by biopsy and also with the necessity of biopsy in spite of a negative smear if the clinical evidence is at all suggestive of cancer.

# Management of Cerebral Palsy

By Frederic B. House, M.D.  
Ann Arbor, Michigan

THE PROBLEM of managing cerebral palsy is one of the most interesting phases of physical medicine. It is also an important aspect of the work in physical medicine. In the broader sense of the term, cerebral palsy refers to any neuromuscular paresis or paralysis caused by lesions in the brain. Cerebral palsy frequently follows a cerebrovascular accident. Traumatic lesions cause it. Gunshot wounds during the war produced many bizarre cases of cerebral palsy. Postoperative cases may present the problem of cerebral palsy. Since we are interested in only the permanent and nonprogressive lesions, no attention is given to the cerebral palsy resulting from expanding lesions in the brain.

Cerebral palsy occurs in children as a result of congenital lesions, birth injuries and postnatal diseases in about the same numbers as does anterior poliomyelitis. It differs in incidence from poliomyelitis, however, in that the number is relatively constant from year to year and from place to place. Economic status does not influence the occurrence. Undoubtedly the largest group of the cerebral palsies is of the infantile type, and most of the remarks that follow will be concerned with this aspect of the problem. However, we must not fail to transfer the lessons learned from the children to the cases that appear in adults.

Phelps has estimated that in every 100,000 population there are seven cases of cerebral palsy born each year. These seven are broken down as follows: One dies in infancy; two more are definitely feeble-minded and are therefore not candidates for treatment. Of the four remaining cases, one is so severely physically handicapped that he is hopeless from the standpoint of physical rehabilitation, and one is so mild that he scarcely needs the advantages of a program for treatment, leaving two cases moderately involved as candidates for any program of therapy. Two cases each year means forty treatable cases under twenty-one years of age

at any one time. After this age, treatment is apt to be less effective.

Economically the program for rehabilitation in these cases would appear to be quite sound. One must consider not only the possibility of training the child so that he may become a useful and productive member of society, but in the more severely handicapped case one must also consider the possibility of releasing, for more productive work, the attendants who would otherwise be required to care for him.

From the humanitarian standpoint one must only consider the intelligent child who is unable to express himself without the aid of training to justify any program that might be devised for the care of this group of patients. Also, one must consider the service to the parents and the whole family from which the handicapped child comes in considering the value of such a program.

## Diagnosis

The diagnosis of cerebral palsy is usually made on the history. The patient states that there was a sudden loss of muscular co-ordination, associated with signs indicating intra-cranial disease. In such a case the diagnosis is made, and the physical examination has only to detail the type of change that is present. In children the story is usually one of failing to acquire certain expected skills requiring muscle co-ordination. It is seldom possible to make the diagnosis before the age of six months to a year, because in many cases the defect is manifest by the persistence of the infantile reactions. If the child fails to learn to walk in the first two years or persists in attempting to walk on his toes, there is probably some cerebral defect accounting for it. Or he may not be able to sit up in spite of apparently good muscle control in the supine position, indicating an absence of righting reflexes. Finally, he may throw his arms around in an inco-ordinate fashion, or be unable to hold his feet still in learning to walk. The history may indicate that the child learned to walk, and that following a febrile disease with convulsions, the skill of walking was lost. When a history such as this is elicited, the diagnosis of cerebral palsy is fairly certain.

The details of the history should include the story of the parents' reasons for suspecting that the child is handicapped, such as related above. The family history should then be investigated for evidence of similar cases. The general mental endow-

From St. Joseph Mercy Hospital, Ann Arbor, Michigan.

Delivered in Bay City, Michigan, at Seminar on Physical Medicine, under the auspices of Physical Medicine Committee of Bay City General Hospital.



ment of the family may be brought out here and the occurrence of left-handedness may be indicated, since this may be of importance in planning the child's training.

The prenatal history and the circumstances of the birth itself should be known. These facts may help in the determination of the etiology of the lesions.

Following this, we should record as accurately as possible the picture of the child's development up to the time of coming in for treatment. This will include the time he first held his head up, first crept or sat alone. We should learn what the parent has discovered about the child's attempts to speak, his hearing and sight and his apparent handedness. We want to know about his intelligence.

Finally, the history of former treatment, if any, is recorded. This will include the use of appliances or drugs and details of operations that may have been done.

After the history, an examination is made and a working impression is formulated, indicating the diagnosis, the etiology, the intelligence and the treatability.

### Aims of Treatment

One of the things that treatment does not do is cure cerebral palsy. I think many of us are over-impressed with this fact, and picture a cerebral palsy program as a room full of severely crippled children who come for months for treatment and finally are discharged to make their own way. There is always the question of how much help has been given.

We do not cure cerebral palsy, but given a person afflicted with this disease, we train him to make the best use of his remaining faculties. We try to bring out the best there is in the child, and with what he has teach him to meet the physical demands of daily life. These demands have been very neatly set forth by Deaver and Brown. This idea of the demands of daily life may have to be altered slightly to apply to the child. We do not expect the child to learn to drive a car, and we do not demand that he write a letter at an early age. One only has to watch his own child of four to obtain a fair picture of these demands. The four-year-old has to be able to yell "Daddy" at the top of his lungs at 6:00 a.m. to be sure that everyone in the house is awake. Next he has to be able to throw the covers back, put his feet on the floor and

take off in a full run for the bathroom. He then comes to the very skilled operation of unbuttoning his pajamas, going to the toilet, and buttoning them up again. Then he should wash his hands, and at the same time that he throws the soap on the floor, he must be able to pull his towel off its bar and come out saying, "Where is my breakfast?" These all require neuro-muscular skill.

Now, as he is coming out of the bathroom, he trips on the truck he left in the hall and is suddenly faced with the tremendously involved procedure of getting onto his feet again. When he gets to the breakfast table, he is faced with the problem of feeding himself—not just to get the food into his mouth, but to get it in in a manner acceptable by his family.

We could follow him through his whole day and soon see the physical demands put on him. If the child is handicapped, treatment is directed towards training him to meet the demands in the most normal manner possible. If we cannot train him to do an operation in the normal manner, then we may have to devise some substitute technique.

### The Ideal Treatment Center

The ideal device for meeting this problem is a rehabilitation center where the talents of many can be made available for the child's treatment. One physician should co-ordinate the work of the several interested workers. This job may fall to the physiatrist, the orthopedist, the pediatrician, or the neurologist. His requirements are that he is informed in the management of the disease and is able to give detailed instructions to the various therapists. He should have available consultation from the other specialists named. In addition, there must be available help from the otologist and ophthalmologist and the psychiatrist.

He should have available the proper equipment and the services of the physical therapist, occupational therapist, speech therapist, psychologist, and the social worker. All of these people should combine their ideas through the medium of the co-ordinator and decide on the exact extent of the handicap, the aim of treatment and the way treatment should be conducted. It is important to do first things first.

### Pathology and Etiology

Pathologically, these cases all represent a loss of central nervous system tissue, and the form that

the disease takes depends on where this deficit is. Patients with defects in the cerebral cortex show the stretch reflex in some muscles and other signs of pyramidal tract disease, and these are the cases termed spastics. When the defect is in the basal ganglia, again an absence of tissue and function, the peripheral manifestation is in-co-ordination of movement, which may be associated with athetosis tremors or choreoform movements. Finally, if the lesion is in the cerebellum, there will be ataxia and loss of balance.

The cause of these defects is now thought to be chiefly one of congenital absence of tissue, rather than a sequel of obstetrical injury. The very fact that the number of cases is uniform throughout various economic groups would indicate strongly against the obstetrical trauma being an important factor. One thinks of the loss of tissue as being analogous to a child being born without a finger or a hand, or being born with a harelip or a heart lesion. Birth injury may be responsible for a very few of these cases. Of the postnatal cases, convulsions for any reason may be responsible for some of them. Inflammation of the brain during the early months of life, especially when it is associated with convulsions, is undoubtedly responsible for many of the cases of athetosis.

### The Plan of Treatment

In planning the treatment for any individual case, the first problem that presents itself is whether or not the case is treatable. To answer this, frequently months of study are necessary. It is very easy for one to label a spastic child as feeble-minded because of his inability to express himself due to his physical handicap. Before a child is called untreatable, he must have the benefit of consultation with persons who are able to tell us his ability to see and his ability to hear. We should also like some indication of his mentality from persons who are experienced in testing children physically unable to express themselves adequately. Even though the problem of treatability is first in our minds in seeing the child, the answer to this may not come until treatment has been in progress for several months. His response to a trial of treatment itself is one of our best indications of treatability.

It is usually left to the group who are treating the child to classify accurately his physical handicap. Although it is possible to describe many different manifestations of cerebral palsy, I believe

that from the practical viewpoint of treatment that these cases can be divided into three large groups. The first group comprises the typical spastic. This patient is identified by the finding of at least one muscle showing the stretch reflex. The stretch reflex is simply an exaggeration of the normal reflex, which tends to maintain a part against passive motion. It is an exaggeration of the reflex that gives us a knee jerk on the sudden stretching of the quadriceps muscle by tapping the patellar tendon. In the spastic muscle this reflex will be elicited by rather slow stretching, whereas in the normal muscle the reflex results from the sudden stretching instituted by the hammer. However, it is still true in the spastic muscle that if the stretching is slow enough, the stretch reflex will not be elicited, and this fact forms the basis for much of our treatment. Once a child is identified as falling into the spastic group, indicating a lesion in the cortex, it is necessary to evaluate each muscle individually, since in the treatment of the spastic child we tend to treat individual muscles. Each muscle must be labelled spastic, normal, weak or flaccid.

The second group I shall refer to as the athetoid, including in this group most of the miscellaneous types of tremor, chorea, and rigidity. These patients in the typical case reveal in-co-ordination of movement with excessive purposeless movements. There may be an attempt on the part of the patient to stop some of the excessive movements, producing a muscular tension which may be very difficult to distinguish from true spasticity. There will not be, however, the stretch reflex in these cases, and we come again to this criterion for making the distinction. Some of these cases may require considerable study before one can be certain whether or not he is dealing with a problem of spasticity or one of tension athetosis. As in the problem of treatability, it may be wise to defer the conclusion as to classification in many cases.

Finally, the third group to distinguish is that of ataxia. This is a lesser group, probably comprising only about 10 per cent of the total cases of cerebral palsy. It is distinguished by the finding of the patient's inability to orient himself in space without visual aids. Most often it is general, but it is possible for it to involve only one extremity. Treatment is usually training to substitute for balance reflexes.

Having classified the case, one must make every attempt to identify the associated sensory defects



which may be important in training. These include particularly sight and hearing.

After all these facts are determined about an individual problem, some definite plan of treatment must be formulated at the outset in order to prevent being lost in a tangle of in-co-ordinated efforts. It may not be possible to treat all the defects at one time, and it will be necessary to decide which ones are of first importance.

### Techniques

The diagnosis and evaluation of the case requires many consultants, and in the treatment of each child several therapists are needed. I tend to think of physical therapy as being of first importance. It is frequently, however, only a groundwork for the training that the occupational therapist may give the child. It may be of little value without the help given by the orthopedist in the form of braces and in some cases operative intervention, and it may be enhanced by aid from drugs.

In the spastic child, treatment is directed toward individual muscles. If the muscle is spastic and shortened, it must be stretched, and this is accomplished by slow stretching, not rapid enough to elicit the stretch reflex. A trained therapist may find light percussion over the muscle may help in relaxing the spasm and facilitating stretching. The weak muscle must be treated with resistive exercises and massage in order to increase its tone and strength. Because of the spastic's inherent loss of many of the instinctive movement patterns that normal people are born with, exercise of the parts as a whole may be important in establishing basic action patterns. These exercises at the same time loosen stiff joints and stretch shortened muscles. My custom has been to place much of the problem of actual treatment on the shoulders of the physical therapist, and I am sure that the good results were chiefly due to her technique, aided by detailed prescription based on accurate diagnosis. The spastic child may be a candidate for surgery in the form of neurectomies. The results of an operation may be more rapid than prolonged physical therapy, and this may be an important factor in favor of this type of treatment in some cases. One must be very certain of his diagnosis before advising surgery. If the neurectomy is done on a tension athetoid thought to be a spastic, much harm is done. The indications for tendon lengthening and peripheral nerve destruction are very

precise. If the spastic muscle is opposed by a normal muscle and its weakening or lengthening would produce a normal balance of power, then an operation may be indicated. If, however, it is opposed by a weak muscle, then surgery would only tend to produce the disastrous effect of a joint supported by weak muscles on both sides, and if opposed by a spastic muscle, the result would be a reverse of the original condition.

Braces are frequently useful in treatment of spastic paralysis. They can be used to stretch shortened muscles, and the fact that their usefulness may be prolonged throughout the twenty-four hours makes them an indispensable aid to physical therapy in many cases.

Treatment of athetosis is based on treatment of groups of muscles. A whole part is involved in this excessive athetoid movement, and not individual muscles. One must frequently train the child in co-ordination from the shoulder down to the hand in attempting to give him control of his hand. The principle in the athetoid is to teach the child to move from a relaxed position. Conscious relaxation of muscle groups followed by movement is the key to improved co-ordination. In teaching a very young child, this may require considerable ingenuity on the part of the therapist. Carrying over the training of physical therapy into occupational therapy, the child may be taught to feed himself, always making each movement from a relaxed position.

In the management of the ataxic, treatment of isolated muscles or groups of muscles is of little value. The whole body must be trained in balance, using substitutes in the form of visual aids for the inherent lack of balanced control.

Having given the child this basic training in physical therapy, two other therapists must work with him concurrently or subsequently, as indicated by the problem and the progress.

The occupational therapist will take the hand and arm that has been taught to move by conscious control and teach it to hold a spoon and carry food to the mouth, and thereby teach the child to feed himself. When should this training be begun? It certainly would be an error to start it before the age of eighteen months, since we can scarcely expect a normal child to do much with feeding himself before this time, although many of course start much younger. In the younger cases the occupational therapy may be the simple game of moving blocks from one box to another. The

attempts made will give the child some basis for subsequently learning to feed himself.

All the other needs of daily life are taught the child in order, in relation to his needs and ability.

The occupational therapist also is active in conducting group room activities in which the child may for the first time play with other children and may for the first time be left without the immediate aid of his parents to help him out of tight spots.

At the proper time the speech therapist should be available for training the child in speech. During his training the child should be watched for the proper time to begin. He may not reach the stage of needing vocal expression until later than the normal child, and to attempt training previous to this may be wasting time. The speech problems follow the pattern of the various types of cerebral palsy. The spastic may show spasm in the muscles of articulation, in the tongue or pharynx, or he may show spasm or in-co-ordination in the intercostal muscles and the diaphragm. Training for relaxation followed by motion is the aim of treatment. Training for a steady flow of air through the larynx may be the first step, to be followed by articulation. The approach to the speech problem in the athetoid is much the same. The actual technique involved represents a specialized phase of the work usually left to the speech therapist entirely.

### Result of Treatment

What, then, can be expected from an ideal program of management? I think of the children as being on various levels of physical ability, from the group handicapped beyond any known methods of approach to the normal. Our treatment then may boost them along the incline. The ones near the top may join the normals, the ones near the bottom may reach only a very elemental level.

What is the value in the child's progress of learning specific physical skills? For instance, if we can teach a child to button a button, we have given him the key to dressing himself. If we can teach him to write or even operate a typewriter with one finger, we may be giving him the key to joining the normals in common educational facilities. In this latter example, the question of whether or not they would learn writing or typing anyway is not important, because time is important. The sixteen-year-old cannot start the first grade, and if he does finally learn to write at that age, it

is too late for him to take advantage of the education available to him.

I feel, therefore, that it can be demonstrated objectively and conclusively that by a systematic program of management the child can be made to progress along the incline towards normalcy. Further, by teaching key skills, we may greatly detract from the importance of his handicap. He may find that he cannot walk as well or as fast as his normal brother, but he may be his superior in the enlightenment of education that we have made available to him.

### Practical Applications

In concluding, I would like to mention some practical applications stemming from the consideration of the ideal. In the first place, let us use the facilities we have, even if they are not ideal. Now the family doctor, whose need has been emphasized lately, may serve many, if not all, the functions that we ideally delegate to various specialized workers. He is his own social worker, knowing the patient in the home. He is his own psychologist, knowing many times about how much the patient knows and also how bright grandpa was. If the family physician recognizes one of these problems and there is not readily available a whole setup for management, he should use what he has. He can usually find orthopedic help, and if a physical therapist is available, she can teach the child the groundwork already described and benefit him greatly.

In the adult cases, I think it is a crime to neglect these people. I recall a patient I had recently who suffered a cerebrovascular accident with resulting hemiplegia. It did not appear to me after examination that she was doomed to rapid deterioration, and yet she was unable to get out of bed and help herself. After the physical therapist had strengthened her muscles with bed exercises, she found she could get up, but her whole problem began to center around the fear of falling without anyone to help her up. The answer we found to this problem was teaching the patient to fall and get up from the floor without help. After this key skill was acquired, she made rapid strides in learning to care for herself.

A girl of twenty-two came to me recently because of a painful abdomen, and while examining her, I found that she suffered also from athetosis of a considerable degree of severity. She showed

*(Continued on Page 851)*



# Correlation of Roentgenograms of Clubfeet with the Basic Pathologic Anatomy

By F. Bruce Kimball, M.D.  
Port Huron, Michigan

IT SEEMS INCREDIBLE that many clinics in this country and almost all clinics in Britain make no use of the x-ray in the management of congenital clubfeet. Since the earliest dissections,<sup>6</sup> it has been common knowledge that the pathologic findings are essentially in the bony structures and that the soft tissue changes are probably secondary to them. The attainment of a normal foot from a clubfoot depends upon the realignment of the bony structures. All of the deformities of the individual bones and the relationship of one to the other are readily shown by roentgenograms, to greater or lesser extent depending on the age and the degree of ossification.

calcaneus respectively. Less well shown and not discussed in Scarpa's monograph is the relation of the calcaneus to the talus. These changes, first described in 1842 by Johann Weis<sup>7</sup> in his doctor's thesis, constitute the primary pathologic anatomy of talipes equinovarus. The medial bowing of the tarsal and metatarsal bones, the shortening of soft tissues medially and the lengthening of them laterally are secondary changes. Although they are a



Fig. 1. Sketches of the osseous anatomy of an adult's clubfoot (Antonio Scarpa, 1818).

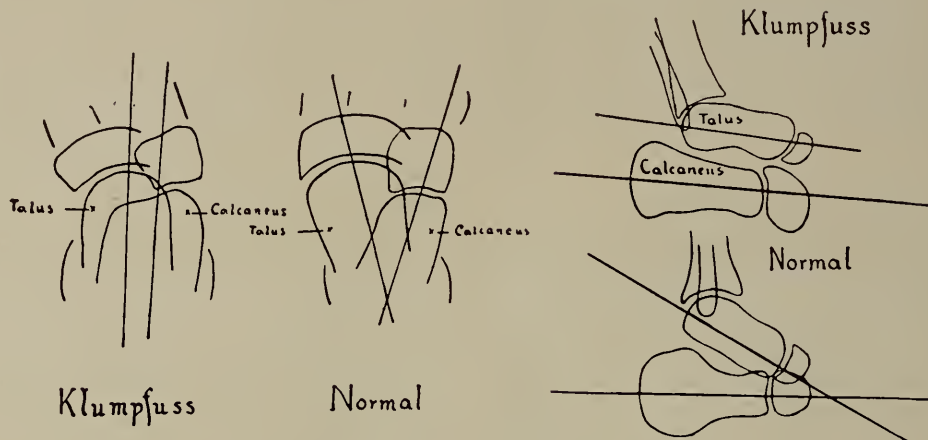


Fig. 2. Guntz' original drawings to show parallelism.

In Figure 1 the characteristic bony deformity can be quickly reviewed. This early drawing by Scarpa in 1818 demonstrates the inversion, adduction and equinus with which everyone is familiar. It also shows the talus well forward, nearly out of its mortise due to equinus, yet unchanged in its essential relation to the tibia. Its medial curve and similar deformity of all of the bones of the foot are admirably demonstrated, as are the relations of the navicular and cuboid to the talus and

factor to be reckoned with in therapy, they respond when treatment is properly directed to the bony deformity described by Weis. In this deformity the calcaneus is rotated about its long axis into a position of inversion, and it is also rotated about a vertical axis which accounts for the adduction deformity of the clubfoot. The talus, held securely in its ankle mortise, responds only by a medial bowing of the neck, and thus the calcaneus is in a position beneath and parallel to the talus.

Parallelism of the talus and calcaneus was first brought forward by Wisbrun<sup>8</sup> in 1932 and again

From the Department of Orthopedic Surgery, University Hospital, Ann Arbor, Michigan.

by Guntz<sup>2</sup> in 1934. The latter's drawings, reproduced in Figure 2, show that parallelism is apparent in both the antero-posterior and lateral planes. In 1935, Kite<sup>3</sup> emphasized the importance

normal foot in full dorsiflexion, the anterior tip of the calcaneus rides by the anterior end of the talus, and that normally the axes of these two bones form an angle of approximately 35 degrees.



Fig. 3. Antero-posterior roentgenograms of a normal foot (left) and an untreated clubfoot (right).



Fig. 4. Lateral roentgenograms of a normal foot (left) and a clubfoot (right), the clubfoot being a fairly flexible case in this instance.

of this factor as seen only in the antero-posterior view. In a study of the recurrent cases in his clinic, he noted that of those that had recurred, all had residual parallelism, and he was the first to point out the need for correction of this factor. He also showed the manner in which the position of the navicular is revealed by the direction of the metatarsal rays shown in the roentgenograms (Fig. 3).

Kite's reasoning as to the mechanism of recurrence in these cases, which he believed due to the pressure of the calcaneus against the talus, is incomplete. By referring to Guntz' line drawings and to the roentgenograms in Figures 3 and 4 of the antero-posterior and lateral views of a normal foot and a clubfoot, one can see that in the

This angle is referred to as the *talocalcaneal angle*. In the untreated clubfoot it is zero degrees in both views. In the partially treated or relapsed clubfoot it varies from a few degrees to 30 or 35 degrees in the antero-posterior view but always remains approximately zero in the lateral. *As long as parallelism exists in the lateral view, regardless of the antero-posterior appearance, the foot is not fully corrected.*

As Kite demonstrated, if the forefoot is still in adduction at the cessation of treatment, the normal thrust of the weight will promote a return of the deformity. He pointed out the roentgen signs, and these should be well known. There are other accompanying roentgen findings which are less well known and seldom recognized. It has



been stated above that restitution of the lateral talocalcaneal angle is essential for a normal foot and function. This angle cannot be attained as long as the tip of the calcaneus impinges on the

of the clubfoot problem. Other than medial bowing there is no malformation. The calcaneal sulcus which is normally seen in the lateral view of a calcaneus and which forms the floor of the tar-

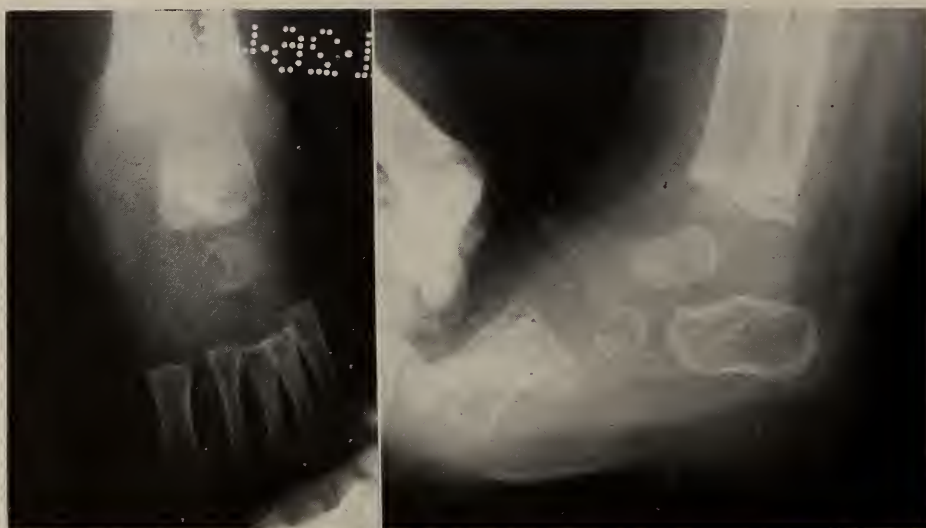


Fig. 5. Roentgenograms of a partially corrected clubfoot. Parallelism and absence of calcaneal sulcus are evident in lateral view.



Fig. 6. Lateral roentgenogram of a normal foot with heel held in varus to show the resulting loss of the calcaneal sulcus.

sal sinus is not visible because of residual, presumably uncorrected, varus of the heel. Figure 6 shows a normal foot held in varus with complete loss of the sulcus, although its outline is visible in the background because of the absence of osteoporosis in this normal example. As long as varus persists, the calcaneal sulcus will be invisible. When the sulcus appears, the foot is ready for dorsiflexion and is not ready before that time. Should the foot be brought up too soon before the calcaneus can ride by the talus, the foot will bend at the calcaneocuboid joint producing a rocker bottom foot.

One might question the value of the x-ray in the newborn untreated case inasmuch as all discussion has been directed toward stages in treatment at later dates. Carefully taken roentgenograms of both feet of the newborn furnish an excellent record of the extent of the deformity at birth. On rare occasions other changes will be revealed, such as delayed ossification, multiple ossification centers for one bone, coalition of bones and other anomalies which should have a bearing on the method of treatment and ultimate outcome of the foot.

Although Kite<sup>4</sup> has discussed the technical aspect of taking x-rays of clubfeet, it will bear repetition. The antero-posterior view should be done

talus. That this impingement can still occur after the antero-posterior view shows full correction can be demonstrated (Fig. 5). In these x-rays the antero-posterior angle appears adequate, and from them one would be justified in beginning dorsiflexion of the foot. Compare the appearance of the calcaneus in the lateral view with a normal (Fig. 4), and the lack of contour is striking. Bohm<sup>1</sup> in 1928 described this as a malformation in development of the calcaneus and considered it the crux

with the tube tilted 15 degrees so that the central ray comes from a position anterior to the foot and is directed toward the talus. In the newborn the child is placed on his back, hips and knees flexed, the foot steadied on the film without attempting correction of the deformity. A second film can be taken at the same time if desired to show the amount of correction available at that time and thus the degree of flexibility. In all subsequent films the foot should be held in a position of maximum correction.

We are indebted to Marique<sup>5</sup> for a simple method of holding the foot for the lateral view which practically assures a perfect "bimalleolar profile." The child is placed on his back, with the lower extremities in full extension. Each foot is grasped by the tips of the toes and, by turning the lower extremities into external rotation at the hips, the feet will come to lie flat on their outer borders allowing good lateral views of both feet on the same film. Again in all views subsequent to the originals the feet are held in maximum correction. Here a word of warning is necessary. One must be certain that the pressure of the foot against the cassette does not prevent the heel from being in maximum correction of the varus component, or a false absence of the calcaneal sulcus may be interpreted as a need for delaying dorsiflexion when the loss of the sulcus is similar to that in Figure 6 and merely due to technical error.

### Summary

The technique and findings in roentgenography of congenital clubfeet have been reviewed and the findings correlated with the pathologic anatomy and with the stages in the therapy of this deformity.

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## MANAGEMENT OF CEREBRAL PALSY

(Continued from Page 847)

the grimacing, in-co-ordinated tongue movements and exaggerated athetoid movements of the hands, especially when under nervous tension. One hesitates to render unsolicited information, but I asked about this and found that the whole family was confused about this disease and had been since the girl was a child. At eighteen months she was normal and walked well. Then, following a febrile illness associated with convulsions, she lost this ability to walk and had great difficulty learning it again. She had been taken to a well-recognized diagnostic clinic and had come out with a diagnosis of residual of poliomyelitis. Not much of an idea was given the parents as to what should be done, and eventually she was taken to the chiropractic clinic and had been having manipulations of her neck at frequent intervals since. The family was interested in the diagnosis of post-encephalitic athetosis that I gave them and were willing to try relaxation exercises. These were given with benefit, and the only facility used was the physical therapist.

It would be hard to examine a patient such as this before and after treatment and demonstrate improvement, but she was able to sit and converse with much less motion of the hands, she could walk without dragging one toe as she had formerly, and she stated that the value to her of being able to lie down and fall asleep rapidly was considerable.

### Summary

I believe that we should all be aware of the nature and magnitude of the problem presented by patients with cerebral palsy. We should make an effort to provide ideal facilities for their management. At any one time we should make full use of the facilities at hand when such a person comes to the medical profession for help.

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# Thyrotropic Exophthalmos from the Viewpoint of the Ophthalmologist

By Francis H. Adler, M.D., Harold G. Scheie, M.D., and Richard Dennis, M.D.  
Philadelphia, Pennsylvania

TWO CLINICAL entities have emerged from the disease complex known as Grave's disease. During the period in which they were becoming defined as separate disease entities, they have been described in medical literature under many different names. The common type of exophthalmos in Grave's disease with marked symptoms of thyrotoxicosis due to diffuse toxic goiter has always been known as "thyrotoxic exophthalmos." The second type was first reported in the literature by the surgeons who found that in an occasional case of Grave's disease the exophthalmos became much worse after thyroidectomy instead of getting better. These cases were termed "progressive exophthalmos" by the surgeons who precipitated them by operation, "malignant exophthalmos" by the ophthalmologists who treated them unsuccessfully, and "exophthalmic ophthalmoplegia" by the neurologists whose chief interest was to differentiate them from other cases of ocular motor paralysis. More recently a syndrome known as "chronic orbital myositis" has been described by Dunnington, which may eventually be accepted as a closely associated, if not an identical, condition.

The best terms suggested so far, and ones which are likely to remain, are "thyrotoxic exophthalmos" for the usual type of Grave's disease, and "thyrotropic exophthalmos" for the others, since it is now recognized that the latter group are due directly to the presence of thyrotropic hormone from the anterior lobe of the pituitary.

It is important to recognize the existence of these two types of Grave's disease because each has a quite different significance. Not only is their pathogenesis different, but their treatment is the opposite, and the choice of wrong therapeutic

measures has frequently led to tragic consequences. While occasional cases of Grave's disease are seen which represent each entity in its purest form, the majority of cases show some of the characteristics of each, and the final decision of the type is not always easy. Some authors, for example, Pochin and Rundle,<sup>4</sup> consider the condition one disease, with the picture varying according to the preponderance of action of the pituitary or of the thyroid. The majority of authors feel that the subgrouping is justified on both clinical and experimental grounds.

The ocular signs provide the earliest and easiest means of differentiating these groups, and it is for this reason that ophthalmologists are frequently in a good position to suggest the diagnosis. The purpose of this paper is to point out the eye signs by means of which one may classify a case of Grave's disease in either the thyrotoxic or the thyrotropic group. It is obvious, however, that the final decision must rest on other findings as well.

The ocular signs of Grave's disease are well known to all clinicians, especially those which are seen in the ordinary case of diffuse toxic goiter. These consist of:

1. Lid signs, of which three are of importance:
  - (a) Dalrymple's sign—widening of the palpebral fissure.
  - (b) Von Graefe's sign—lag of the upper lid on downward gaze.
  - (c) Stellwag's sign—infrequency of blinking.
2. Changes in position of the globe—exophthalmos.
3. Defective ocular movements.
4. Edema of the lids and conjunctiva.

For the sake of simplicity, the ocular signs seen in the pure form of each of these groups will be described. By far the greatest number of patients show combinations of these findings, but with a preponderance of those belonging to one or the other group.

## Ocular Findings in Thyrotoxic Exophthalmos

Widening of the palpebral fissure occurs very early in the majority of cases of diffuse toxic goiter and gives the patient a characteristic stare or appearance of fright. It is due to spasm of the smooth muscles of the lids, one of which is known as Mueller's muscle and the other as Landstrom's muscle. Mueller's palpebral muscle effects a pull

From the Department of Ophthalmology, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania.

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between the tarsus and the point of insertion of the superior rectus. Hence, it produces both lid retraction and a tendency to proptosis. In the case of the inferior palpebral muscle of Mueller, the muscle is continued at the fascial expansion from the tendon of the inferior rectus to the lower lid. A spasm of these fibers, therefore, exerts a direct pull between the tarsus of the lid and the under-surface of the globe. Landstrom's muscle consists of a number of unstriated fibers surrounding the front part of the globe, extending from the back of the orbital septum anteriorly to the region of the equator of the globe, where it is connected to fascial expansions derived from the ocular muscles near their point of attachment to the eye. The combination of Mueller's and Landstrom's muscles exerts a steady pull forward on the globe and, according to Mulvany,<sup>3</sup> is capable of producing all degrees of exophthalmos, provided there is coincidentally sufficient impairment of tone of the extraocular muscles. Others have pointed out the part played by weakness of the extraocular muscles in the development of exophthalmos in thyrotoxicosis (Mainnini<sup>1</sup>). Weakness of other striated muscles in the body occurs in thyrotoxicosis, but true thyrotoxic myasthenia is rare.

In the majority of cases, there is a positive Von Graefe sign, or lag of the upper lid on downward gaze, directly dependent on the increased tonus or spasm of the unstriated muscle in the lids. While the lids can be closed voluntarily by contraction of the orbicularis oculi, the mere weight of the upper lid on downward gaze is insufficient to allow it to follow the globe when the patient looks down, as the unstriated muscle stays in spasm. It is not definitely known what this spasm is due to. Marine and Rosen<sup>2</sup> believe that it may be due to circulating adrenalin and consider that adrenalin acts more readily on unstriated muscle when there is an excess of thyroxin present in the circulating blood. It has also been shown that thyroxin has a myasthenic effect on striped muscle, so that the lid retraction in thyrotoxicosis may be due to both the direct action of adrenalin acting on thyroxin-sensitized smooth muscles, aided by the weakening of the antagonistic striped muscle by the thyroxin. The infrequent blinking which is often quite noticeable is likewise due to the spasm of the smooth muscle which inhibits the lid movements.

The exophthalmos found in thyrotoxicosis may

be real or apparent only. Widening of the palpebral fissure itself gives rise to the appearance of exophthalmos without the eyes being abnormally prominent. There is a wide range in the prominence of the eyes among normal people, and unless one eye is more prominent than the other by more than 1.5 mm., it is often difficult to say that an individual has true exophthalmos. Soley<sup>5</sup> gives a distribution curve of exophthalmometer measurements in normal individuals and finds that the range is from 12 to 21 mm. with a mean of 16 mm. Similar measurements made on a group of patients with diffuse toxic goiter ranged from 12 to 24 mm. with a mean of 18 mm. While it is true that in the normal group only 5 per cent exceeded 19 mm. and 32 per cent of thyrotoxic cases were above this figure, yet the actual difference between the two groups is quite small, and one may well wonder how often true exophthalmos is present. In thyrotoxic exophthalmos, the proptosis is nearly always bilateral and frequently improves as the patient recovers from his thyrotoxicosis. Even if the case terminates fatally, the exophthalmos may disappear, as has been noted at post mortem. This is in sharp contrast to the type of exophthalmos found in the thyrotropic group. Ocular muscle paralyzes seldom occur in thyrotoxicosis, and when they are present are generally fleeting palsies which vary from one muscle to another. Edema of the lids and conjunctiva is never seen.

#### Ocular Findings in Thyrotropic Exophthalmos

Widening of the palpebral fissure and the von Graefe sign are also present in this group, but are due more to the exophthalmos which dominates the picture than to spasm of the smooth muscle in the lids. The exophthalmos is real and always progressive. It may become so extreme that the lids cannot be closed, with resultant exposure of the cornea, ulceration, perforation and loss of the eyes. Exophthalmos is present early in the disease and is often unilateral, so that an orbital tumor may be suspected. It is probable that many of the cases of so-called "pseudo-tumor of the orbit" are of thyrotropic origin. The chief characteristic of the exophthalmos is its progression, unless adequate treatment is instituted. In the majority of these cases, there is also edema of the lids and edema of the conjunctiva. The edema lifts up the bulbar conjunctiva as it gravitates to the lower



cul-de-sac. This is never seen in thyrotoxic exophthalmos. It is not due to exposure, as it is seen at a stage when the exophthalmos is not marked, and in several of our cases, the swelling of the lids and conjunctiva was the chief complaint which brought the patient to us. Before the condition was recognized, it was thought that the edema might be on an allergic basis. In one case, the edema preceded all other signs. When the exophthalmos has reached the stage where the globe is exposed during lid closure, the conjunctiva becomes inflamed and so chemotic that it may protrude enormously and add to the unsightly appearance of the patient. Ocular muscle involvement is frequent and characteristic. Movement of the globe in one or more directions is affected, rather than paralysis of any one ocular muscle, elevation and abduction being affected twice as often as depression and adduction. In the unilateral cases, elevation of the globe seems to be especially affected. It is probable that the disturbance in motility is due to the histologic changes in the muscle and not to any nerve paralysis. These changes consist in an enormous enlargement of the muscle due to a slow deposition of fat in between the muscle fibers, together with an accumulation of water. Subsequent to this, there is round cell infiltration and fibrosis. These changes are the cause of the exophthalmos, which, unlike that seen in the pure thyrotoxic case, does not recede after death. It is imperative, therefore, to institute proper therapy at the earliest stage possible.

### Pathogenesis of the Ocular Changes

It seems likely that all of the ocular signs in the pure thyrotoxic case are due to stimulation of sympathetically innervated muscle by adrenalin or some similar substance when the muscle is sensitized by an excess of thyroxin in the blood. The unstriated antagonistic muscles may at the same time be weakened by the thyroxin. The widening of the fissures gives rise to the characteristic appearance of the patient and simulates an exophthalmos. Weakness of the unstriated ocular muscles, plus the extreme lid retraction, may also cause some real exophthalmos. In the pure thyrotropic case, the thyrotropic hormone liberated from the pituitary produces a deposition of fat and a change in water balance of the tissues of the orbit, so that they become edematous. This causes edema of the lids and conjunctiva and a true exophthalmos, as the orbit becomes filled with fluid and fat

and subsequent inflammatory products. It is beyond the scope of this paper to review in detail the clinical or the experimental evidence suggesting the nature of the tie-up between the thyroid and pituitary, or, for that matter, between these and other glands, such as the gonads which seem to be of influence in the production of the thyrotropic type of exophthalmos. All observers are agreed that injections of thyrotropic hormone will produce exophthalmos in normal rabbits and guinea pigs and that the exophthalmos is much more marked if the thyroid is first removed from the experimental animal. There can be no question, therefore, that once the thyrotropic hormone of the pituitary has begun to cause the changes in the orbit which lead to exophthalmos, removal of the thyroid rapidly accelerates the process. It is this untoward effect of thyroidectomy which makes it imperative to recognize the two types of exophthalmos and separate all cases of Grave's disease into these two groups wherever possible. Reduction of the circulating thyroxin by medical or surgical means is indicated in the thyrotoxic group, whereas this is contraindicated in the thyrotropic group. One may even have to supply thyroid to elevate the basal metabolic rate. Thyroidectomy in this type of case has tragic consequences.

### Other Clinical Features Which Aid Differentiation

1. In the thyrotoxic type, the basal metabolic rate is always elevated. In the thyrotropic type, it may be elevated, but is usually normal or subnormal.
2. In the thyrotoxic type, the cholesterol is usually low or normal, while in the thyrotropic type, it is not characteristic and may be low, high or normal.
3. The glucose tolerance curve in the thyrotoxic type is usually elevated, indicating a decreased tolerance to blood sugar, whereas in thyrotropic conditions, the curve is not characteristic.
4. In thyrotoxicosis, the following signs are usually quite prominent
  - (a) Fast pulse.
  - (b) Loss of weight.
  - (c) Tremor.
  - (d) Perspiration.
  - (e) Widening of the pulse pressure.
  - (f) Irritability.
  - (g) Voracious appetite.
  - (h) Sensitivity to heat.

All of these may be thought of as a mark of increased thyroid activity. In the thyrotropic cases, these usually are not prominent because there may or may not be an excess of thyroid activity.

5. It is possible in thyrotropic cases to do an assay for the thyrotropic hormone in the blood or urine. This is definitely not a clinical procedure or even an ordinary laboratory technique, as it is time consuming and difficult to carry out. One of the methods used is to demonstrate the increased metabolic activity of thin slices of thyroid or liver tissue in culture medium when the thyrotropic hormone is present.

6. Another laboratory procedure which may be done, and which may be of help in thyrotropic conditions, is to assay the urine for gonadotropin. The urine is injected into mice. If gonadotropin is present in excess quantities, the uterus becomes increased in weight, and this is measurable. This test is based upon the assumption that if gonadotropin is increased, thyrotropin also will be increased due to the fact that both are produced from the anterior lobe of the pituitary.

### Treatment of Thyrotropic Exophthalmos

While it is not the purpose of this paper to discuss the treatment of either of these types of Grave's disease, the following treatment has been carried out on most of the cases of thyrotropic exophthalmos we are reporting by Dr. Edward Rose at the University of Pennsylvania Hospital.

1. Administration of thyroid extract and iodine to inhibit the thyrotropic hormone.

2. X-ray of the pituitary gland. One or two courses of 1000 r each are generally given. This is believed to be more effective when given in the acute stage before there is fibrosis in the eye muscles.

3. Estrin and related compounds may have a beneficial effect similar to that of iodine by inhibiting the gonadotropic and thyrotropic output from the anterior pituitary lobe. Thyroid extract may give dramatic improvement in patients, even though they show some evidences of hypothyroidism. Generally, two grains of the desiccated thyroid are given daily, but following thyroidectomy larger amounts may be necessary—even 5 to 7.5 grains daily.

4. Decompression operations may be done early,

as suggested by Naffziger, Mulvany and others, or they may be held for a last resort. It seems logical to do an operative procedure of this sort early, before ulceration and other secondary changes in the eyes have taken place. The procedure is palliative only, and in our hands the Naffziger has been the most satisfactory type of operation. It should only be done in those cases in which there is a definite exposure of the cornea on lid closure and danger of a keratitis.

### Case Reports

*Case 1.*—S. H., a man aged thirty-six, was first seen March 22, 1943, complaining of swelling of both upper lids. Non-inflammatory. Eyes normal save for edema of both upper lids. Slight chemosis of the conjunctiva. This was thought to be an allergic manifestation, and the patient was studied from this point of view. Exophthalmometer reading on first visit, 24 mm. in each eye, base line 108. Four months later, exophthalmometer reading, 27 mm. each eye. At this time had a definite lid lag and an exposure keratitis in the left eye. Basal metabolic rate, -18. No ocular muscle palsies. Highest exophthalmometer reading recorded, March 20, 1944: 29 mm. and 30 mm. at 105.

Treatment: Starting in 1943 was given proloid, 3 grains daily and premarin. Has had two series of pituitary x-rays, September, 1943, and November, 1943.

Last seen January 31, 1947. Exophthalmometer reading, 27 mm. each at 105. No edema of conjunctiva. Still has marked lid retraction in both eyes. Vision normal with glasses. No changes in visual fields.

Result: Improved.

*Case 2.*—A. J. B., a man aged fifty, had exophthalmos since July, 1943. Exophthalmometer reading in 1943, 27 mm. Seen in office May, 1947. Lid lag, puffiness of lids, conjunctival edema. Exophthalmometer reading, 31.5 mm. right and 31 mm. left, base line of 104. Vision normal with glasses.

In 1943 his basal metabolic rate was +48. Patient was recognized as a thyrotropic type of exophthalmos and given thiouracil and premarin. September and November, 1943, received x-ray to pituitary, 1000 r on each side, each series.

In 1944 was given two series of x-rays to the thyroid gland itself because of continued elevation of BMR. Thyroidectomy was contraindicated because of the thyrotropic signs. Third series of x-ray to thyroid because of increased metabolic rate, October, 1944.

Last seen, July, 1948. Much improved. Thyroid reduced in size. Only slight thyrotoxicosis. BMR in 1947, +21. Patient had slight limitation of motion in all directions of gaze, but no marked paralysis or diplopia.

Result: Improved.

*Case 3.*—Mrs. R. P. had a thyroidectomy October, 1945. Seen February 8, 1947, complaining of eyes still



protruding, tearing and eyes tiring. Widened fissures, lid lag and tucking of lids. No edema of conjunctiva, but lids definitely puffy. Exophthalmometer reading, OD: 23.5, OS: 22, base line 94.

Two months later, exophthalmometer reading, OD: 26, OS: 24. No muscle weakness.

Diagnosis: Mild thyrotropic exophthalmos, postoperative.

Patient put on thyroid medication and intermittent iodine. The thyroid was discontinued after only one week. On the date of last visit, July 12, 1948, there was no edema of lids. No injection of conjunctiva. Vision normal.

Result: Much improved.

*Case 4.*—Mrs. L. B. F., seen June 16, 1945. Edema of lids, widened fissures and lid lag. Exophthalmometer reading, 25 mm. each eye at 105. In 1946, BMR, +30. Increase in exophthalmos to 27 and 28 mm. Seen April 1, 1948. BMR, -12. Exophthalmometer reading, 26 and 27.5 mm., base line 105. Patient was taking thiouracil from June, 1945, to November, 1945. Then had two courses of x-ray to the thyroid in November, 1945, and May, 1946. Following this, patient was maintained on propylthiouracil until June, 1948. At this time, BMR was -10. Thyroid gland not palpable.

Result: Much improved.

*Case 5.*—C. P., a woman aged fifty-four, was admitted July 13, 1947. Diagnosis: Thyrotropic exophthalmos with exposure keratitis, both eyes. When first seen, BMR, -1. Exophthalmometer reading, OD: 23.5, OS: 23.5, base line 100. Very limited convergence, and rotations of each eye were limited in all directions of gaze, especially upward. Exotropia present. Generalized compression of visual fields. Given Lugol solution, 10 drops three times daily; dessicated thyroid, 30 mg. daily; stilbestrol, 0.1 mg. daily. Also given x-ray to pituitary, 1000 r each side. Because of the bilateral keratitis, had a tarsorrhaphy on the left side. Following x-ray to the pituitary, patient began to improve immediately. Exophthalmos remained the same but the lids became less puffy and the keratitis disappeared.

Result: Improved.

*Case 6.*—E. B., a man aged thirty-three, had had a thyroidectomy, following which he developed thyrotropic exophthalmos. Admitted November 20, 1942. The symptoms of hyperthyroidism began in November, 1940, and in 1941 a subtotal thyroidectomy was done. Following this he had several abdominal operations. He was admitted November 8, 1942, to the Surgical Service because of marked exophthalmos and was transferred from there to the Eye Ward. Exophthalmometer reading, 29 mm. and 27 mm., base line 100. Injection of conjunctiva, limitation of ocular movements, especially up and to the left. Therapy consisted of x-ray to the pituitary, stilbestrol and thyroid. Last seen November, 1947. Has had no treatment at all since 1945. Exophthalmos 29 and 26 mm. BMR, -3.

Result: Improved.

*Case 7.*—M. H., a woman aged forty-five, had exophthalmos, first noted July, 1941. At that time, had edema of the lids. Diagnosed thyrotropic exophthalmos. Exophthalmos 25 mm. each eye. BMR, -32. Given potassium iodide, 10 drops three times a day. March, 1942, exophthalmos had increased to 25 mm. and 29 mm. BMR the same. Patient put on thyroid. Admitted to hospital because of increase in exophthalmos. Received x-ray treatment to the pituitary and to the orbits. Because of suspicion of malignancies of the thyroid, one nodule was removed for microscopic examination. Patient put on proloid. Edema of lids disappeared and exophthalmos regressed. Last reading, 23 mm. and 24 mm.

Result: Much improved.

*Case 8.*—J. N., a woman aged fifty, was seen November 10, 1944. Had hyperthyroidism ten years previously and was irradiated at Lahey Clinic. Eye signs did not subside but BMR dropped satisfactorily. History states had a thyroidectomy in 1938, although the BMR not elevated, but this was probably a biopsy as letter from Lahey Clinic indicates. Following operation, required a tarsorrhaphy because of corneal changes due to exposure. Also had cervical sympathectomy for retraction of upper lids both eyes. When seen, fissures widened. Exophthalmos, 24 and 26 mm. Edema of lids. Injection of conjunctiva with chemosis. Ocular movements limited laterally in each eye and a definite limitation in the field of action of left inferior rectus.

Treatment: Estrogen and thyroid. March, 1945, x-ray to pituitary. Chemosis and injection of conjunctiva lessened. In 1945 returned to Lahey Clinic and had a bilateral Naffziger orbital decompression. Report states with good results.

Last seen January, 1948. Exophthalmos, 21 mm. and 22 mm. Limitation ocular movements in all directions of gaze and no convergence. Palpebral fissures normal and no lid lag. Chemosis and conjunctival injection still present.

Result: Improved.

*Case 9.*—B. S., a man aged fifty, stated that in 1927 he had a marked prominence of the eyes and a raised basal metabolic rate. Recorded as +12. Had limitation of convergence, widened palpebral fissures, lid lag, enlarged thyroid and thyrotoxic signs. Also injection of conjunctiva. Had thyroidectomy in 1931 at University Hospital. He became hypothyroid following the operation and had to have thyroid extract. In 1934 BMR recorded as -8. Exophthalmos recorded as marked at that time. During that year, the exophthalmos progressed to the point where he had an exposure keratitis in the left eye which subsequently had to be enucleated. He continued to get thyroid extract. Then had two courses of x-ray to the pituitary in 1935. Exophthalmos persisted in remaining eye. Recorded in 1940 as being 25 mm. By 1938 the exophthalmos had receded somewhat following x-ray to the pituitary, but in 1940 the reading was still 25 mm. Patient died in 1941.

*Case 10.*—U. K., a man aged sixty-five, noted in 1927 as having a progressive exophthalmos in the right eye. By 1930 the left eye had also become involved and at this time began to have thyrotoxic signs. In 1933, exophthalmos was still progressive and patient was put on iodine. Limitation of upward gaze, chemosis of conjunctiva and injection of conjunctiva. Diagnosed thyrotropic exophthalmos at that time with secondary thyrotoxic signs. In 1946, exophthalmos, 27 mm. and 26 mm. BMR, +46. Limitation of upward and lateral gaze. Limitation of convergence and diplopia. Lid lag and mild thyrotoxic signs. In July and November, 1946, had x-ray to pituitary. In December, 1946, exophthalmometer reading, 25.5 and 26.5 mm. Less chemosis but conjunctival injection persisted. In September, 1947, had a hemi-thyroidectomy followed by x-ray to the thyroid gland, because carcinoma was demonstrated in the thyroid. By July, 1948, the exophthalmos had increased in the right eye to 30 mm. and in the left to 26 mm.

Result: Patient worse.

*Case 11.*—L. H., a woman aged sixty-two, was referred by Cardiology for fundus examination. Patient had hypertensive cardiovascular disease. Patient noted to have edema of the lids and injection of palpebral and bulbar conjunctiva. Moderate exophthalmos which measured 23 mm. and 21 mm., base line 99. It was also noted that patient had paralysis of upward gaze. She had some tucking of the lids but no lid lag. Convergence was good. No widening of the palpebral fissures. Diagnosed thyrotropic exophthalmos. Put on stilbestrol, proloid and x-ray to pituitary. When last seen, exophthalmos 21.5 mm. right and 20.5 left. Still had lid edema and injection of conjunctiva.

Result: Improved.

*Case 12.*—Mrs. L. H., aged twenty-eight, had increased basal metabolic rate, discovered in 1942. Thyroidectomy was done in August, 1942, at Temple University. No difficulty was noted until summer of 1945 when her eyes began to protrude. BMR at this time was +5 or +6. There was a gradual protrusion of the eyes from 1945 to 1946. She had been on thyroid during 1945 and 1946. In August, 1946, patient showed tucking of upper lid OD. Exophthalmos, 25.5 mm. right and 23 mm., base line 101. No edema was noted. No limitation of extraocular motility. In October, 1946, exophthalmos had increased to 27.5 right and 26 left, base line 101. The eyes appeared worse than the measurements would indicate. At this time the patient was on stilbestrol. November, 1946, exophthalmometer reading, OD: 28 mm., OS: 25.5 mm., base line 101. Patient is still on stilbestrol. Condition of patient at time last seen—worse.

*Case 13.*—W. F. M., a man aged seventy, was a person with hypothyroidism who had a thyroidectomy in 1935. In December, 1946, he began to have diplopia and noticed prominence of his eyes and swelling of his lids with a conjunctivitis. At time of examination, January, 1947, exophthalmometer reading, OD: 24 mm., OS: 24 mm.,

base line 96. Some limitation of upward movement. Injection of conjunctiva with chemosis. Lid lag. Retraction both eyes. March, 1947, no edema of conjunctiva or lids. Exophthalmometer reading, OD: 23.5 mm., OS: 23 mm., base line 96. There was little change in the exophthalmos during 1947 and 1948. Last seen August 10, 1948. Exophthalmos had reduced to 23 mm. and 22 mm., base line 96. There had been no edema of conjunctiva during last year.

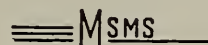
Patient was definitely improved since time of first visit. However, he gives evidence of exophthalmos developing following thyroidectomy.

*Case 14.*—E. C., a man aged sixty, had a thyroidectomy in fall of 1942. In May, 1943, he began to have diplopia and from that time until January, 1946, was treated with prisms and other means without success. At this time exophthalmos was 21 mm. and 24 mm., base line 104. Lid retraction was present. Some restriction of movement of right eye outward. Marked restriction of left eye in all directions. Injection of conjunctiva. Edema of the lids. Patient was followed at frequent intervals. Last seen February, 1947. Exophthalmos recorded as 21 mm. and 22 mm., base line 104. Less edema of lids and less injection of conjunctiva. Patient had been on proloid and stilbestrol during this time.

Result: Improved.

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## STATISTICS THAT DO NOT LIE

The December issue of the Statistical Bulletin of the Metropolitan Life Insurance Company discussed the population increase in the United States for the year, 1948.

As a result of a high birth rate and an all-time low death rate plus immigration, the increase in population was 2,500,000. The birth rate during the past few years has outstripped our fondest anticipation. We quote the following significant figures and wonder what will happen to the world if other nations are matching our reproductive vigor:

"In the eight-year period 1941-1948, about 25,700,000 babies were born in our country, as compared with only 19,200,000 in 1931-1938. The total for the last eight years thus is the greater by 6,500,000, or by one-third."

Progress in the reduction of infant mortality will augment the increase in population. It is estimated that by the 1950 census we should have a total population of 150 million.—Editorial, *The Journal of the Oklahoma State Medical Association*, July, 1949.



# Intra-uterine Volvulus of the Ileum

## *With Absorption of the Ileum in a Full-Term Pregnancy*

By Frederick E. Ludwig, M.D., and  
 Claud A. Ludwig, M.D.  
 Port Huron, Michigan

CONGENITAL ANOMALIES of the small and large intestines are comparatively rare. Especially rare are those cases which are more advanced than a simple atresia of the ileum or of the large bowel, and which are caused by a volvulus of some part of the intestinal tract. A recent article by Brunazzi and Lyons,<sup>1</sup> describing atresia of the terminal portion of the ileum, is an excellent coverage of the literature of reportable cases of atresia. There are very few cases reported of volvulus of the intestine occurring during intra-uterine life, and those cases reported are frequently noted to be the cause of premature delivery in infants. In this case, the infant maintained its normal stay within the uterus, to be delivered at the tenth lunar month. The considerable damage which was in the abdomen of the fetus occurred sometime previously, an estimate of the time being uncertain, even though we are sure that this must have occurred several weeks, six to ten, prior to delivery.

### Case Report

This was a female child, 5 pounds 9 ounces, born ten months after conception. The labor was uncomplicated and the delivery followed the pattern of two previous deliveries from this mother. The family is of the lower income bracket, with a difficult home situation and little comprehension of proper personal care about themselves. The mother did not come in for prenatal care until she was seven and one-half months pregnant, probably after the baby received the intra-uterine volvulus. This mother had had the three pregnancies within a three-year period, and during that time never had a blood count better than 76 per cent hemoglobin and 3,900,000 red blood cell count. It was a distinct effort to keep this woman in any kind of shape, and it was no doubt due partly to her personal dislike for coming to the doctor.

Following delivery, the baby girl passed a small amount of meconium. It was noted, however, that the rectum was slightly stenosed, so a digital dilatation was done, and immediately a fairly large stool of meconium was passed. In spite of passing this meconium, the baby

began to become distended and after twelve hours began to regurgitate large amounts of dark green liquid which had a fecal odor. After twenty hours, the baby became very dry, and refused to take even small sips of water or formula. Nausea and vomiting continued, and a large amount of dark green material was forcefully vomited at each episode. Within twenty-four hours, the baby had lost eight and a half ounces. At that time, a second dilatation of the rectum was done and a saline flush was given. Nothing was recovered by this procedure. The baby was started on subcutaneous fluids and an attempt was made to diagnose the condition by x-ray.

The x-ray examination of the chest and the abdomen, consisting of a single anterior-posterior projection, showed considerable gas in the large bowel. Nothing unusual was seen within the chest. This gave us no leads as to the probable diagnosis, so, a second radiographic examination was made with the baby standing on its head, and at that time, a barium enema was given, which showed the lower colon to be rather redundant with gas. There was no gas from the transverse colon on, and the transverse colon and the cecum failed to fill, and the roentgenologist made a diagnosis of failure of complete rotation of the colon.

The baby's condition seemed to get worse so that it was felt that an exploration was indicated, in that we had been unable to obtain any fecal material, other than the first batch of meconium found within the first twelve hours after delivery. Exploration of the abdomen was done under local anesthesia through a median right rectus incision. There were many distended loops of small bowel and many tough adhesions found throughout the right abdomen. The cecum and the appendix could not be found. There were two loops of gangrenous bowel attached to the right body wall, and during the procedure, rents were made at two points in this swollen and gangrenous bowel. They were exteriorized and decompressed through the openings unintentionally made in the bowel. The adhesions in the right side of the abdomen were so dense and so completely covered the area, that it was impossible to define the stomach or the liver or the gall bladder. We were not able to identify the loops of small intestine at the time of the operative procedure. Our preoperative diagnosis had been intestinal obstruction with a possible atresia of the ileo-cecal valve. After we had completed the operative procedure, we knew no more about the baby's condition than we had previously, due to the extreme amount of gangrene and the large number of adhesions found throughout the abdominal cavity. In spite of the decompression of the bowel, the baby rapidly got worse and after a period of eight hours died. We were able to get a very complete pathological report with an autopsy, following the death of this child, as follows:

*External Examination of the body.*—The body was that of a well-developed, moderately well-nourished, white female infant, showing an attached dry umbilical cord. There was a vertical lower right abdominal incision through which extruded two segments of small intestine, both presenting operative ostia. There was moderate rickety rosary formation and some bowing of the tibia and fibula.

From the Surgical Service, Port Huron General Hospital, Port Huron, Michigan.



*Internal Examination of the Body.*—The body was opened by routine postmortem incision extending from manubrium sterni to symphysis pubis. Marked abnormality was noted in the abdominal cavity, but in other portions and spaces internally, nothing remarkable was noted. The abnormality of the abdomen is described under the gastrointestinal system.

*Lungs.*—The lungs were soft, smooth, pink, crepitant and fully aerated. No abnormality was noted.

*Cardiovascular.*—The heart lay intact in its smooth glistening pericardial sac. The epicardium was pale red, firm, and uniform throughout. Valves were thin, competent, and no congenital anomalies were encountered. Ductus arteriosus and foramen ovale were both patent.

*Liver.*—The liver was extensively involved in adhesions along the right side and right margin. The gall bladder was incompletely incorporated into the liver substance and penetrated through to the anterior mid-surface, with a broad ring of liver tissue about the fundus of the gall bladder. On cut surface the liver was not remarkable.

*Pancreas.*—Normal in size, color, and lobulation.

*Spleen.*—Normal in size, firm, purplish, uniform throughout.

*Adrenals.*—Showed the typical infantile hypertrophy.

*Kidneys.*—Normal in size, firm, uniform, lobulated, well-proportioned and well-differentiated.

*Internal Genitalia.*—These were essentially normal, but the ovary and tube on the right side, and the uterus on the right side were very heavily involved and covered with dense whitish fibrous adhesions which were part of a generalized formation of adhesions in the right abdomen, as described under the gastrointestinal system.

*Gastrointestinal.*—Strong adhesive bands were observed developed between the right side of the stomach and the hepatic flexure of the colon extending to the midline notch of the liver. Numerous adhesions extended over the right side of the liver to the right abdominal wall, and very dense adhesions extended downward posteriorly and inferiorly from the right border of the liver. Over the surface of the liver, the true coronary ligament appeared to be inadequately developed. Further bands of adhesions passed between the duodenum and the liver. The ascending colon had a short mesocolon, with attachment quite mesial to the normal position, so that the usual lateral fixation of the ascending colon was not observed. The ascending colon was markedly tortuous and was very heavily involved in adhesions, one of which produced a marked constriction and distortion at the hepatic flexure. There was marked distortion with volvulus effect, involving the terminal or lower half of the ileum. In its lower segment, the ileum extended into the lower right quadrant and was involved in very numerous loops of ileum together. These were quite well developed, fibrotic, and essentially congenital in character. The ileum itself appeared to terminate blindly in these adhesions, the terminal end extruding through the laparotomy wound, serving as an operative ostium. Further dissection showed that another section of intestine or ileum was also present, barely 4 cm. in length, serving as a second ostium through the operative wound. This segment was continuous and fused with another segment of ileum or loop, approximately 3 cm. in length. This

was found to be close to the cecum and ascending colon, which had no entering ileum. Whitish to yellowish material was present in the second blind pouch, and greenish-brown liquid material in the first. Greenish-brown fluid was present in the proximal ileum and curded whitish mucoid material in the large intestine. Sections of the lower ascending colon and cecum showed an ileocecal valve with a short segment of ileum, approximately 4 cm. in length, extending mesially from the large intestine. Here it appeared to be heavily involved in numerous other adhesive bands.

*Bladder.*—No anomaly of the urachus was observed.

*Thymus.*—The thymus was quite small, soft, pale red, flabby.

*Summary of Findings.*—Congenital inclusion of the gall bladder, congenital adhesions of the liver, secondary periuterine adhesions, secondary salpingo-oöphoritis, mechanical ileus, paralytic ileus, volvulus of the ileum, chemical peritonitis of old origin (congenital) with adhesions, old volvulus of ileum with gangrene and absorption of segments of ileum.

*Cause of Death.*—Intestinal obstruction due to an old intra-uterine volvulus of the ileum with gangrene and absorption of the ileum.

*Physiology of Development.*—The normal delivery and the fact that we were able to get a fair amount of meconium at the first dilatation of the rectum, and with the first saline flush, served to mislead us in this case. It probably was the reason for our not discovering a major difficulty prior to twenty-four hours. Due to the fact that meconium was found at birth and subsequently following the saline flush, it meant that during the intra-uterine life of the fetus, the gastrointestinal tract was completely patent and that meconium was able to pass through the intestinal tract down into the large bowel and the rectum. The best estimate concerning when the volvulus occurred was probably six to ten weeks before delivery. This process involved such a large amount of the terminal ileum, that gangrene was produced and several loops of bowel degenerated and were completely reabsorbed, producing several blind loops, as were recorded in the autopsy findings.

This case also serves to demonstrate the fact that radiographic use of barium is practically useless in children of this age and with a condition of this type. It merely gave us an idea that we were dealing with a massive condition and one that would undoubtedly be fatal. However, it did serve to crystallize our thoughts so that an exploration seemed indicated, in spite of the poor condition of the patient. It is doubtful whether any surgical procedure could have corrected the large number of defects found in this case, even if a complete diagnosis could have been made early, and even if the child had been in better shape.

The remarkable thing in the abdomen was the attempt by the body to absorb the loops of ileum that were dead and that had become gangrenous. The large adhesions were evidence of a long-standing reaction, one that had probably been enforced from six to ten weeks. It is nothing short of amazing that such a marked con-

(Continued on Page 873)



# Nonsurgical Biliary Drainage for Acute Pancreatitis

## Two Case Reports

By Meyer O. Cantor, M.D., F.A.C.S., and

Warren W. Babcock, M.D., F.A.C.S.

Detroit, Michigan

A RECENT SURVEY of the literature<sup>3,4,5,7,8</sup> leads one to the inevitable conclusion that the treatment for acute pancreatitis is still unsettled. Whether the treatment be medical or surgical appears to influence the course of the disease very little, if we are to judge by mortality statistics. The mortality rate for surgically treated cases is not appreciably better than for those cases treated medically during the acute stages of the disease.

Because the mortality rate for acute pancreatitis, however treated, is close to 50 per cent, it has long been felt by the authors that anything that could be done to improve these results was justifiable. We have all been searching for a method of treatment that would appreciably lower these mortality figures.

Archibald and Kaufmann, in their classic paper on acute pancreatitis,<sup>1</sup> define acute pancreatitis as "an acute lesion of the pancreas, consisting in primary necrosis with secondary reactionary inflammation, usually caused by the entrance of a chemical irritant (bile or duodenal contents) into the pancreatic duct, and characterized by symptoms of violent epigastric pain, often with shock, of toxemia from absorption of necrotic tissue products, of peritonitis and of adynamic ileus (paralytic obstruction)." They base their definition upon the results of numerous experiments upon cats as well as their studies of clinical cases in humans. Although some cases of acute pancreatitis are so fulminating that death ensues rapidly despite treatment of any kind, nevertheless these workers stress the importance of drainage of the biliary tract in order to prevent further damage to the pancreas. Archibald and Kaufmann believe that since in the vast majority of cases acute pancreatitis is due to the forcing of bile into the pancreatic duct as a result of a spasm of the sphincter of Oddi, treatment should

be based upon the prevention of additional infected or chemically altered bile from entering the pancreatic ductal system.

In the great majority of cases, it has been conceded that a spasm of the sphincter of Oddi is responsible for the flow of bile into the pancreatic duct, with a resultant pancreatitis. In a smaller percentage of cases, acute pancreatitis has been found clinically to be due to the presence of a biliary calculus in the ampulla of Vater. The presence of a calculus in this location results in a deflection of the bile from the common bile duct into the pancreatic duct. In an occasional case, pancreatitis has been found as a result of the retrojection of bile or duodenal contents into the main pancreatic duct which opened into the duodenum independently of the common bile duct. Archibald and Kaufmann mention a case in which autopsy revealed an acute pancreatitis involving only the wedge of pancreas served by the duct of Santorini which opened freely upon the duodenal surface.

In reviewing the work of Archibald and Kaufmann, one is immediately impressed by the frequent association between biliary disease and pancreatitis. This is the basis for our present-day surgical treatment. Although some surgeons advocate drainage of the lesser peritoneal cavity or retroperitoneal drainage behind the second portion of the duodenum, most surgeons are of the opinion that since the peritoneal cavity as a whole cannot be drained, very little is accomplished by such an operation. Indeed we know that the indiscriminate use of drains may set the stage for the future development of bowel obstruction. The most commonly used operative procedure is drainage of the common bile duct and also cholecystostomy if the cystic duct is open. If the gall bladder is grossly diseased, then many surgeons recommend cholecystectomy and choledochostomy. Cholecystostomy alone is the operation of choice when the gall bladder is found to be grossly normal and the cystic duct is open. It should be obvious that a closed and obstructed cystic duct would completely invalidate cholecystostomy as a therapeutic procedure. There appears to be some grounds for the suggestion that the mortality rate increases with the extensiveness of the operative procedure.

The nonsurgical treatment for this medical catastrophe consists of an effort to alleviate symp-

From Grace Hospital, Detroit, Michigan.

tomatic discomfort as well as to correct any pathological physiology. A vigorous effort is made to keep the patient in electrolyte balance and correct anemia. The association of diabetes with pancreatitis is looked for and corrected if present, and the occasional appearance of hypocalcaemia is sought and corrected to prevent tetany. Since many of these patients develop an adynamic ileus, the use of the long intestinal decompression tube to combat the intestinal distention has been found to be of great value. The tube is passed down the gastrointestinal tract as far as the ileum when used for this purpose. The nonsurgical treatment for acute pancreatitis can readily be seen to make no direct attack upon the etiological factors producing the acute pancreatitis.

In the two case reports which are the subject of this paper, we have attempted to attack directly the disease process itself by checking it at its source, i.e., at the junction of the biliary and pancreatic ductal systems.

Recent studies of the intraluminal pressure of the stomach and duodenum, by Brody and Quigley,<sup>2</sup> have shown that the pressure within the duodenum may range from 30 to 75 cm. of water. In one case, they demonstrated a phasic pressure peak of 140 cm. of water in the second portion of the duodenum. This pressure was found in an apparently normal subject. When we consider that the flow of bile into the duodenum occurs under a pressure of 22 cm. of water,<sup>6</sup> it suggests the possibility of an increase in pressure within the duodenum acting as a pressure barrier to normal biliary drainage in some cases. The result of this might well be a deflection of bile from the common bile duct into the pancreatic duct, thus resulting in pancreatitis. If associated with an increase in phasic duodenal pressure there is a spasm of the sphincter of Oddi or a compression of the duodenal papilla, then the stage is set for the possible development of pancreatitis. In those cases in which acute pancreatitis was found associated with an independently opening pancreatic duct into the duodenum, and in the case reports describing a wedge type of pancreatitis found around that portion of the pancreas supplied by the duct of Santorini, it must be evident that changed bile or duodenal contents must have been injected into these independently opening pancreatic ducts. The presence of bile within the stomach, found as a result of intubation, is

clear-cut evidence that bile may be readily forced through the pylorus and into the stomach. Since this is so, could not the same mechanism force bile or duodenal contents back into the pancreatic ducts, particularly in those cases in which there is an increased intraluminal pressure within the second portion of the duodenum?

The further observations that the presence of hydrochloric acid within the duodenum causes this viscus to contract and also results in a spasm of the sphincter of Oddi<sup>1</sup> may be an additional factor in the development of this disease.

With these facts in mind, we consider the possibility of decompressing the second and third portions of the duodenum in an effort to satisfy all objectives in a direct attack upon the causative factors which may be involved in the production of acute pancreatitis. By so doing, the following five-pronged attack would be added to our armamentarium: (1) The duodenum would be kept dry. This would prevent duodenal edema which could increase the blockage at the papilla. Stasis of infected bile and duodenal contents bathing the opening of the common bile and pancreatic ducts would be prevented. (2) All gastric acid would be immediately suctioned out so that there would be no possibility of spasm of the sphincter of Oddi from this source. (3) By creating a very low or even negative pressure within the second portion of the duodenum, we would have a mild suctioning effect upon the combined pancreaticobiliary ductal system that opens into it. (4) We would prevent the development of adynamic ileus by our continuous suction. (5) Lastly, we would remove any possibility of duodenal contents being forced into the independently opening pancreatic ducts.

In using the long simplified intestinal decompression tube (Cantor), we have found that when the tube head reached the duodenojejunal flexure, the holes for decompression came to lie in the second and third portions of the duodenum. The lumen of this tube being 18 Fr. and the holes being of large size, continuous suction is able to empty completely the second portion of the duodenum at the site of the duodenal papilla. The second and third portions of the duodenum can be kept empty and a very low pressure maintained. By maintaining a very low pressure or even a negative pressure within the second portion of the duodenum, one might expect a tendency to



suction out the common bile duct as well as the pancreatic duct that opens into it. If these ducts are open, a negative pressure exerted at their mouths within the duodenum should behave as a suction device for this ductal system. Whether this actually occurs is problematical, but our remarkable results in the treatment of the two cases reported suggests it. We feel that a preliminary report at this time, to stimulate comment and interest in this form of treatment, is highly desirable. A larger series of cases will be reported at a later date, and, in addition, the observations of surgeons throughout the country will adequately test the validity of our observations. Suffice it to say that in the two cases reported the clinical improvement was dramatic.

### Case Reports

*Case 1.*—R. L., a sixty-two-year-old white man, was admitted to Grace Hospital complaining of pain in the epigastrium, nausea and vomiting. He had noted the sudden onset of severe pain in the upper abdomen, accompanied by nausea and profuse perspiration, on the day of admission. His bowels had moved normally. The epigastric pain was continuous.

The only relevant finding in his past history was the fact that he had been in the hospital one month prior to his present admission for study because of epigastric distress. At this time, a complete gastrointestinal x-ray series showed no evidence of any pathologic condition in the gastrointestinal tract. At the same time, cholecystograms had demonstrated a nonvisualization of the gall bladder. He had left the hospital with a diagnosis of chronic gall-bladder disease.

Examination at the time of admission revealed a white man who looked about the stated age. He was well oriented and his sensorium was clear. He was very acutely ill. His abdomen was distended, and marked tenderness was noted above the umbilicus. A Levin tube was inserted and continuous suction applied. He was given nothing by mouth. Glucose and saline and Ringer's solution were given intravenously. His temperature upon admission was 103°, pulse 120, respiration 22. Penicillin was started upon the day of admission. Despite these measures, his condition became progressively worse, so that on the third day he developed Cheyne-Stokes respirations and he became disoriented. A Cantor tube was now inserted and fastened to the side of the face when the tube head reached the duodeno-jejunal flexure. After intubation with the Cantor tube, 1,000 to 1,500 c.c. of dark green fluid was suctioned out daily. It looked like bile mixed with mucus. Twenty-four hours following the insertion of the Cantor tube, the patient's condition showed a remarkable improvement. He became rational. His breathing changed to normal, and his pulse improved remarkably in quality, rate and rhythm. Following this, he rapidly proceeded to an un-

eventful recovery, so that by the fourth day later he was able to be up in a chair.

His red blood count on admission was 4,160,000 with a hemoglobin of 90 per cent. His white blood count was 14,750 with 91 per cent polymorphonuclear cells. Of these, 86 per cent were filamented and 14 per cent were nonfilamented. There were 8 per cent lymphocytes and 1 per cent monocytes. His nonprotein nitrogen was 68 mg.; whole blood chlorides, 354 mg.; serum albumin, 4.2, and serum globulin, 2.1. His icterus index was 36. Serum amylase was 136 units. On the sixth day following intubation of the second and third portions of the duodenum with the Cantor tube, his nonprotein nitrogen had returned to normal.

This patient was diagnosed on clinical grounds as having acute pancreatitis. The high serum amylase furnished confirmatory laboratory evidence.

*Case 2.*—M. S., a sixty-year-old white woman, was admitted to the Grace Hospital by Dr. John Slevin with a diagnosis of acute pancreatitis. She complained of severe abdominal pain upon admission. An examination at this time revealed a critically ill woman. She appeared to be stuporous. She was cyanotic and her pulse was obtained with difficulty. She was drenched with a profuse perspiration. Her abdomen was markedly distended with marked tenderness over the mid-abdomen.

The electrocardiogram revealed low voltage through the standard leads with slurring 2 R-S complexes, the T wave inverted in leads 1 and 2 and 5-6, with a low V 4. The diagnosis was myocardial damage, left ventricular strain.

The red blood count was 3,700,000 with a hemoglobin of 78 per cent. The white blood count was 8,300, with 70 per cent polymorphonuclear cells—62 per cent filamented and 8 per cent nonfilamented. The lymphocytes totaled 24 per cent, and eosinophiles 6 per cent. Blood sugar was 400 mg., and nonprotein nitrogen was 25 mg. The urine had a specific gravity of 1.038; albumin was negative, sugar was 4-plus, and sediment examination was negative. The serum amylase was 36 units. The Kahn test was negative. Her temperature upon admission was 102°, pulse 120, respiration 26.

Roentgenograms of chest showed that the right hemidiaphragm was at the level of the fourth rib anteriorly and at the seventh posteriorly. There was considerable thickening in the region of the interlobar septum between the right upper and right middle lobes. Hilar adenopathy was present, with bronchitis manifestations extending into the bases. The transverse cardiac diameter was 132 mm. The configuration suggested enlargement of the left ventricle. It was concluded that the findings were best correlated with an inflammatory lesion below the diaphragm.

A Cantor tube was passed and stopped when the tube head reached the duodenojejunal flexure. In twenty-four hours she had improved dramatically. Her color was good, and her pulse was of fairly good quality. Her condition improved rapidly, with the result that on the eighth day roentgen studies were carried out to verify the diagnosis of acute pancreatitis by exclusion.

Roentgenograms of the gastrointestinal tract showed no pathologic condition. Roentgenograms of the gall bladder showed nonvisualization. This was evidence of a nonfunctioning gall bladder. At this time the patient had clinically completely recovered from her pancreatitis.

### Comment

A review of the case histories of the two patients presented in this paper presents all the findings pathognomonic of acute pancreatitis. In both cases, high values of serum amylase were found. The normal value for serum amylase in the test we used is 15 to 20 units. Both patients were in critical condition at the time intubation was begun. In Case 1, the patient was disoriented, his pulse was weak and thready, and Cheyne-Stokes respirations had appeared.

Both patients showed marked improvement clinically within twenty-four hours after intubation. By the third day, both patients were quite comfortable and no longer appeared acutely ill. The restoration of the altered physiology to normal, as demonstrated by the decrease in serum amylase and the return of the nonprotein nitrogen to normal, proceeded at a slower pace.

Figure 1 demonstrates the intestinal decompression tube in the duodenum, with the head end of the tube at the duodenojejunal flexure. We fix the tube at this point by fastening it to the nose. The large luminal diameter of the tube is clearly visible by x-ray and should be noted along with the size of the holes for decompression. The holes in the second and third portions of the duodenum may be noted—three holes in each. It is the position and the size of these holes that so completely empties the duodenum when an adequate source of negative pressure is applied to the proximal end of the tube.

We suggest that by draining all the bile from the second portion of the duodenum, and by maintaining a low pressure at the point of entrance of the pancreaticobiliary ductal system into the duodenum, a direct attack is being made upon the disease process itself.

We realize, of course, that the remarkable results obtained in two cases do not constitute proof of the value of this new method of treatment.

### Conclusion

1. Two cases of acute pancreatitis are reported.
2. In both cases dramatic improvement followed intraduodenal intubation with the simplified

intestinal decompression tube of 18 Fr. luminal diameter (Cantor tube).

3. We suggest that the presence of the three holes of large size within the second and third

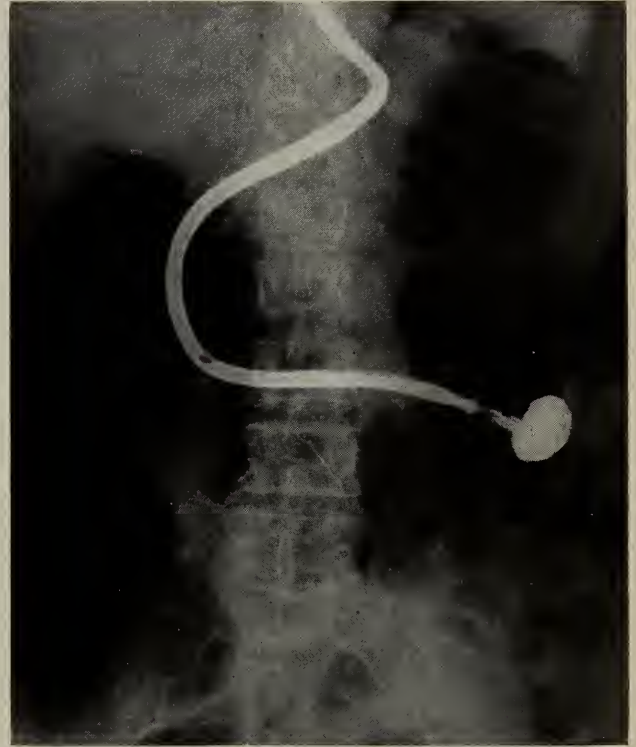


Fig. 1. Note the tube head at the duodenojejunal flexure, the holes in the second and third portions of the duodenum, and the size of the lumen of one of the holes in the second portion of the duodenum at about the site of the duodenal papilla.

portions of the duodenum and the maintenance of a negative pressure were the responsible factors.

4. The tube must be fastened to the face with the letter "D" on the tube at the external nares. When this is done, the tube head will invariably be found at the duodenojejunal flexure. This will result in three holes falling within the third portion of the duodenum and three holes falling in the second portion of the duodenum. The pressure within the duodenum insures that all the holes are functionally active.

5. Although we make no claims for this form of treatment, we suggest its employment in a larger series of cases to test the validity of the results we obtained.

666 Maccabees Building

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(Continued on Page 870)



# Regional Enteritis

By Laurence S. Fallis, M.D.

Detroit, Michigan



AS A RESULT of the stimulation of interest in granulomatous lesions of the small intestine initiated by Crohn and his associates in 1932,<sup>3</sup> a great deal of clinical and investigative work has been carried out. While Crohn's concept that this group of diseases constitutes a clinical entity has remained unchallenged, no agreement has been reached regarding a name for the disease, its etiology remains unsolved, and rival claims regarding surgical treatment have been established. Current literature contains at least ten synonyms: terminal ileitis, regional ileitis, segmental ileitis, jejuno ileitis, ileocolitis, Chron's disease, localized hypertrophic enteritis, chronic interstitial enteritis, ileitis terminales stenosans, and chronic cicatrizing enteritis.

Originally described as terminal ileitis, it is now known that the disease is not confined to the terminal ileum and that the pathologic process may extend beyond the ileocecal valve. Involvement of areas of the small bowel other than the terminal ileum prompted Brown, Barger and Weber<sup>1,2</sup> to advise the use of the term regional enteritis on the basis of it being more descriptive and inclusive than the term regional ileitis. Most authors now use the term regional enteritis, though designation of the disease as terminal ileitis is of such common usage that it is not likely to be entirely abandoned, especially since it is applicable to more than three-quarters of the cases. Segmental enteritis, another good descriptive term, is not likely to be universally adopted because it was not proposed by the earlier writers on the subject.

## Etiology

Regional enteritis presents the picture of an inflammatory process in all its stages, but so far the casual organism or organisms have eluded detection. Many organisms have been incriminated

by various workers, but none has been found acceptable to the investigators, though Felsen<sup>5</sup> contends that a dysentery bacillus is the culprit. The resemblance of the later lesions to tuberculosis led the late W. J. Mayo<sup>6</sup> to suggest avian or mammalian tuberculosis as the etiologic agents. Syphilis and lymphopathia venerea have also been advanced, but without sufficient evidence. A comparison with ulcerative colitis shows that the two diseases have certain features in common, such as a tendency to exacerbation and remission, and suggests that the two diseases may have a common origin. The clinical course of a patient in our series is indicative of such a relationship. A twenty-two year-old girl, after apparently recovering from acute regional enteritis, developed ulcerative colitis, for which ileostomy and subsequent colectomy were necessary. Spreading of infection from acute appendicitis has been suggested, but appendicular involvement is believed by most to be secondary to the ileal lesion, though the remission of symptoms that follow appendectomy lends some credence to this theory. Experimentally, lesions resembling those of regional enteritis have been produced by lymphatic block, thereby bringing in trauma as an etiological factor. Others have suggested a neuropathic origin, pointing out certain herpetiform characteristics of the lesion. From our present knowledge, however, it must be recognized that the etiology is as yet undetermined, and the disease must still be classified as a nonspecific enteritis.

## Sex

Males are more frequently attacked by the disease than females, in a ratio of approximately 3 to 2.

## Age of Patient

Regional enteritis is predominately a disease of young people. In our series, over 80 per cent of the cases occurred in patients under forty years of age, and over 50 per cent occurred in the third and fourth decades between the ages of nineteen and thirty-nine. The youngest patient was aged four, and the oldest sixty-nine.

## Pathology

In the acute stage, the serosa of the involved segment of bowel is fiery red in appearance. The adjacent mesenteric lymph nodes are enlarged enormously, and there is an excess of free peri-

Dr. Fallis is surgeon-in-charge, Division of General Surgery, Henry Ford Hospital, Detroit, Michigan.

toneal fluid which at times contains exudate. Edema is the outstanding feature. The intestinal wall, the mesentery and even the lymph nodes share in the engorgement. When the process includes the terminal ileum, the appendix and sometimes the cecum share in the process. The disease in this stage commonly spreads cephalad, even to and including the jejunum. The line of demarcation between affected and normal bowel is not clearly defined, an observation that should be of help in distinguishing between acute primary regional enteritis and an exacerbation of the subacute stage.

In the subacute stage, the color of the bowel deepens to a maroon shade. The engorgement persists but takes on a more permanent appearance. The bowel wall is thickened greatly, as is the mesentery, but the lymph nodes, while enlarged, are not as enormous as in the acute stage. The diseased portion of the bowel is demarcated sharply from the healthy. Multiple lesions may be present, with normal intestine and mesentery intervening. Freedom from adhesions is a remarkable feature of these conditions. On section, the mucosa usually is ulcerated. This disease in this stage is subject to remissions and exacerbations. It is important at operation to distinguish between primary acute regional enteritis and the acute exacerbation of the subacute stage. It is apparent that some confusion has arisen because of failure to differentiate or accurately describe these two conditions.

In the chronic stage of the disease, the color of the affected bowel deepens still further, to almost a plum color. The bowel wall is thickened enormously and has a leathery feel. The mesentery is thickened so greatly that it is foreshortened, thus pulling the terminal ileum to a higher level in the lower quadrant and providing a valuable diagnostic sign. The lymph nodes are enlarged but, again, not so pronounced as in the acute or subacute stages of the disease. In spite of chronicity the lymph nodes exhibit little tendency to break down or to become calcified. On section, the intestine shows diminished lumen because of thickening of all the coats, more especially the submucosal. This explains why obstruction is so common in this phase of the disease. The involved section of intestine often lies in the pelvis where it may be confused with pelvic tumors. Even in the advanced stage, the freedom from

adhesions is remarkable, although the tendency to fistula formation, either internal or external, is just as characteristic. External intestinal fistula, leading from the surface to the diseased intestine, may be found in any stage of the disease. It often follows ill-advised appendectomy in the acute stage. Internal fistula, however, usually is found in the chronic stage. Other areas of small bowel, colon, bladder or rectum may have a fistulous communication with the diseased ileum. It is probable, though, that the fistulas formed during the ulcerative or subacute stage from erosion of the ulcers.

Fistula is common to all three stages of regional enteritis. The outstanding feature of these fistulas is their intractability. Palliative procedures are ineffective, and limited operations have little place in their management. Permanent cure is brought about only by resection of the diseased segment. Ginzberg<sup>6</sup> has described the mechanism of fistula formation. The bowel ulcerates at the mesenteric border of the bowel and forms an abscess between the leaves of the mesentery. The abscess wall then becomes adherent to an adjacent loop of small intestine, a mobile segment of the colon, the urinary bladder, the pelvic floor, the retroperitoneal tissues or the scar of a recent abdominal wound. Rupture of the abscess wall determines the site of the fistula, which may be either internal or external. External fistulas are most common following removal of the appendix during an acute attack of regional enteritis or after drainage of obscure intraperitoneal abscesses.

### Clinical Features

The symptomatology varies according to the stage of the disease encountered. The signs and symptoms in the acute stage are usually those of acute appendicitis, because since the majority of lesions are in the lower ileum, the attention of patient and observer is directed to the right lower quadrant of the abdomen.

In the subacute phase, ulceration of the mucosa is the outstanding feature; thus diarrhea, anemia, loss of weight, lassitude and low grade fever are the usual complaints.

The chronic stage is characterized by manifestations of partial intestinal obstruction because the thickening of the bowel wall due to fibrosis narrows the lumen.



## Diagnosis

In the acute stage, regional enteritis is confused with acute appendicitis. It is probable that when the disease is confined to the terminal ileum, surgeons will continue to make this diagnostic error because the signs and symptoms are so indicative of acute appendicitis that laparotomy will be performed when the acute process is diffuse. Generalized abdominal pain and distension suggest acute subacute obstruction so strongly that a flat roentgen ray film of the abdomen will be taken in many instances. The finding of multiple dilated loops of small bowel with fluid levels, in the absence of any definite cause of acute obstruction, should lead the observer to consider the possibility of acute diffuse regional enteritis.

In the subacute stage, the typical patient is a young adult male complaining of colicky abdominal pain, loss of weight and generalized weakness. On abdominal examination, an appendectomy scar is seen frequently and a persistent fecal fistula is not uncommon. The abdomen may have areas of tenderness to palpation, but a mass is rare. Auscultation of the abdomen reveals hypermotility of the small intestine. Serial films of the small intestine show a filling defect in the terminal ileum and multiple areas of dilated intestine proximal to this. The ileum may be so narrowed as to fill with only a thin column of barium, the string sign of Kantor.<sup>7</sup> A tendency to acute exacerbations is characteristic of this pathologic process. In the investigation of fistulous tracts having a possible intra-abdominal origin, the first step should be to rule out regional enteritis.

The cause of unexplained fever in young adults occasionally will be found to be regional enteritis.

Bleeding, a rare symptom of regional enteritis, has received scant mention in most case reports; in fact, certain authors even comment on its absence. Considering that mucosal ulceration is of frequent occurrence, one might expect that hemorrhage would be a common symptom. The finding of occult blood has been reported occasionally, but I have been able to find few references in the literature to gross hemorrhage in regional enteritis. Borgen (1938) at a staff meeting of the Mayo Clinic mentioned massive hemorrhages in discussing the diagnosis of regional enteritis. One of the patients in our series had repeated and profuse intestinal hemorrhages as the

outstanding preoperative symptom.<sup>4</sup> His case history has been reported previously.

## Differential Diagnosis

*Acute Appendicitis.*—All of the cases of acute regional enteritis (25 per cent of the series) were diagnosed at laparotomy, and in all but one the preoperative diagnosis was acute appendicitis. Since this has been the experience of others, it is unlikely that these conditions will be differentiated often.

*Ulcerative Colitis.*—In the subacute or ulcerative state the condition may be confused with ulcerative colitis, but negative sigmoidoscopy and negative barium enema films serve to exclude involvement of the colon in most diffuse cases. Segmental ulcerative colitis, on the other hand, may produce a problem because of inaccessibility of the lesion to visualization by the sigmoidoscope and the difficulties of accurate roentgenological interpretation.

*Right Lower Quadrant Masses.*—If the appendix has not been removed, the mass may be due to an appendix abscess. Tuberculosis of the ileocecal region or anywhere in the small intestine, cecal carcinoma or actinomycosis, mesenteric lymphadenitis, Hodgkin's disease and malignancy of the small intestine give rise to masses in the right lower quadrant with symptoms of chronic intestinal obstruction; but, except for tuberculosis, none has the long duration of history of remissions as does regional enteritis. A negative tuberculosis reaction and negative chest films usually will help to rule out tuberculosis.

## Treatment

Since most acute cases are diagnosed at laparotomy for suspected appendicitis, the first question that arises is: should the appendix be removed or should the abdomen be closed with the appendix undisturbed? In our own patients we have not hesitated to remove the appendix, and in no instance has the practice been followed by fistula formation. It is our opinion that many of the case reports in the literature recording the occurrence of intestinal fistula after appendectomy in patients suffering from acute regional enteritis have been due to failure to differentiate between primary acute regional enteritis and the acute exacerbation of a chronic or subacute lesion.

Appendectomy is certainly contraindicated in the latter group of cases as is any operative intervention.

Obstructive manifestations should be treated by the use of the long intestinal tube, for operation must be avoided during acute exacerbations, for the chronically ill toxic patients are ill equipped to stand emergency operations.

In the chronic stage the choice of operation lies between primary resection or short circuiting. In the experience at the Henry Ford Hospital, primary resection with anastomosis has yielded the most satisfactory results. Twenty-eight consecutive resections have been done with but one death. The whole ileocecal segment must be removed when the disease encroaches on the last few inches of the ileum; otherwise segmental resection with end-to-end anastomosis is sufficient. It is important to make wide excision of the mesentery to protect against recurrence, and the whole intestine must be examined carefully so that skip areas of involvement are not overlooked.

Entero-anastomosis around the diseased area may be performed either as the first part of a two-stage resection or as a palliative measure when the patient's condition does not warrant resection. There are numerous case reports of patients having done well after short circuiting without subsequent resection, but in general it would appear that the diseased focus should be removed.

Fistulas usually require resection of the involved area of intestine in order to obtain healing. In complicated cases a preliminary short circuiting is advisable, and in the case of internal fistula involving the colon or rectum, colostomy may be necessary as the first step.

Basically the treatment of regional enteritis is medical—general supportive measures fortified by a generous high carbohydrate, high protein, low fat diet and reinforced by all the vitamins. Anemia should be treated with repeated blood transfusions and iron preparations. The sulfonamide preparations, sulfadiazine, sulfathiazole and sulfasuxadine, have proved of value. One of our patients, treated by Dr. Robert Durham in the Department of Medicine for diffuse ileo-jejunitis, received a total of 1,250 grams of sulfonamide over a twenty-month period. During this period he gained a total of 90 pounds, thereby doubling his original weight, and became symptom free.

## Results of Treatment

Nine patients operated upon with the mistaken diagnosis of appendicitis recovered completely, and none of them has proceeded to develop evidence of the chronic phase of the disease. Radical resection has been performed twenty-eight times with but one death, a mortality of 3.6 per cent. Seven of the resections were for the treatment of recurrences in patients previously subjected to resections; thus one-third of the patients treated by radical operation suffered a recurrence necessitating further operative intervention. Only two patients had entero-anastomosis; one of these was an operative death, and the other one died at home within a year. It is evident that surgical removal, though often necessary, is not the answer to the problem. As time goes on, more and more of our patients operated upon are returning with a recurrence. Recently a patient returned with a recurrence in the jejunum at the ligament of Treitz, ten years after resection of the ileocecal segment for involvement of the terminal ileum. It appears, therefore, that surgical intervention is justifiable only for treatment of the complications of regional enteritis, viz., hemorrhage, obstruction, fistula formation, et cetera.

## Summary and Conclusions

1. The etiology of regional enteritis is not known.
2. It is primarily a disease of young people.
3. Acute primary regional enteritis should be differentiated from acute exacerbation of chronic regional enteritis.
4. There is little evidence that the chronic phase of the disease follows the acute phase.
5. The results of surgical treatment are disappointing as far as recurrences are concerned.
6. Medical treatment should be given persistently, and surgical intervention reserved only for the complications of the disease.

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# Urinary Amino Acid Wastage Studies Following Single Infusions of Amino Acid Mixtures

## Preliminary Report

By John E. Harroun, M.D.,<sup>†</sup> Stanley Levey, Ph.D.,  
and Charley J. Smyth, M.D.

Eloise, Michigan

IN ORDER TO obtain more complete information regarding the fate of intravenously administered amino acids, greater knowledge must be obtained concerning the urinary wastage of these acids. It is known that the metabolic processes in the normal subject are not necessarily the same as those in various disease states. Urinary amino acid excretion has been reported after both the oral and intravenous administration of amino acid preparations in the case of normal man.<sup>2,3,9</sup> We have been unable to find any reports in the literature concerning the amino acid excretion pattern in humans with various degrees of undernutrition. Thus, it was desired to determine the urinary excretion of individual amino acids in undernourished subjects as well as those with normal nutritional status. This is a preliminary report, and complete data will be published later.

## Methods

Eight human subjects were used in this study. Group 1 consisted of four subjects who clinically presented no sign of nutritional deficiency.\* Group 2 consisted of four patients (five studies) who manifested mild to severe degrees of undernutrition. The diagnoses of the four malnourished patients were as follows: the first was convalescing from pneumonia; the second was an aged rheumatoid arthritic patient; the third presented the picture of chronic inanition; and the fourth was a chronic alcoholic who had lost considerable weight, had abnormal liver function tests (brom-sulfalein dye, cephalin-cholesterol flocculation and thymol turbidity) and peripheral neuritis. This

\*The criteria for normal nutrition were: (1) maintenance of, or a slight increase in, weight over the past six months, coupled with a good dietary history; (2) normal serum proteins with normal albumin and globulin levels; (3) normal vitamin C levels. The best criteria according to Cannon<sup>1</sup> (4) is evidence of stable weight along with a careful check of the dietary history.

<sup>†</sup>Dr. Harroun's present address is Watson Clinic, Brookings, S. D.

last patient was followed through a refeeding program<sup>†</sup> during which his protein stores approached normal.\*\*

The following procedures were carried out on all subjects: On the first day of the study 1,000 ml. of physiological saline were given intravenously at a rate of approximately 20 ml. per minute; the subjects were studied after an eighteen-hour fast. The urine was collected for a four-hour period beginning with the start of the infusion. On the second day of the study the fasting

TABLE I. AMINO ACID CONTENT OF THE MATERIAL ADMINISTERED

Amino Acid	Mg./500 Ml. of Solution
Arginine .....	2277
Histidine .....	1004
Isoleucine .....	2796
Leucine .....	6702
Lysine .....	5393
Methionine .....	2550
Phenylalanine .....	835
Threonine .....	1111
Valine .....	2912

(eighteen hours) subjects received intravenously 500 ml. of an amino acid mixture.<sup>‡</sup> The urine was again collected for a similar four-hour period and the content of nine of the essential amino acids determined.

The concentration of the following amino acids in this mixture were estimated: arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine and valine. These substances accounted for about 50 per cent of the weight of the amino acids infused. The remainder was made up of the non-essential amino acids plus glycine. The content of glutamic and aspartic acid in this preparation was very low.

The determination of the individual amino acids was accomplished using microbiological assay procedures. For leucine, isoleucine, and valine, the method of Hier et al<sup>4</sup> was employed. The method of Stokes<sup>8</sup> was used to estimate arginine and threonine. Histidine, methionine, lysine, and phenylalanine were estimated using the methods of Miller.<sup>5</sup>

## Results

The content of each of the essential amino acids in the amino acid mixture infused is given in Table I. The values are only for the L form of the

<sup>†</sup>This program consisted of a high caloric (3500 to 4000 calories per day), high protein (2.5 to 5 grams per kilogram per day) diet. These high values were made possible with the use of a Varco type of interval feeding to which was added "Protenum." The latter was kindly supplied by the Mead, Johnson and Company, Evansville, Indiana.

\*\*Unpublished data.

<sup>‡</sup>Amino acid mixture—10 per cent (VUJN type), prepared by the "recombination and fortification of a casein digest." This was kindly supplied by Merck and Company, Inc., Rahway, New Jersey.

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TABLE II. FOUR HOUR URINARY EXCRETION OF AMINO ACIDS FOLLOWING INTRAVENOUSLY ADMINISTERED PHYSIOLOGICAL SALINE  
The values in the table express mg. of amino acid per urine sample.

Normal Nutrition									
Subject	Arginine	Histidine	Isoleucine	Leucine	Lysine	Methionine	Phenylalanine	Threonine	Valine
L. H.	0.0	30.2	0.0	0.0	5.2	0.0	1.6	0.0	0.0
I. T.	0.0	5.0	6.4	10.7	8.2	0.0	0.8	6.0	0.0
J. Co-II	0.0	10.5	11.8	1.0	6.1	0.1	1.4	0.0	0.0

Undernourished Group									
Subject	Arginine	Histidine	Isoleucine	Leucine	Lysine	Methionine	Phenylalanine	Threonine	Valine
J. G.	1.2	15.1	1.2	1.2	0.4	0.2	1.1	3.5	0.7
C. C.	0.0	3.2	14.3	0.0	2.9	0.2	0.0	0.9	36.4
J. Co-I	0.0	42.4	6.5	3.3	16.0	0.0	4.0	7.9	0.0
J. Ch-I	0.9	9.8	10.8	1.5	4.3	0.4	2.1	6.1	0.0
J. Ch-II	0.0	60.5	6.6	3.0	5.8	0.3	3.0	3.8	6.0

TABLE III. EXCRETION OF AMINO ACIDS AFTER INTRAVENOUS ADMINISTRATION OF THE AMINO ACID MIXTURE.

The values in the table are the per cent of the administered amino acid excreted into the urine. The amount of amino acid lost after the saline has already been subtracted.

Normal Nutrition									
Subject	Arginine	Histidine	Isoleucine	Leucine	Lysine	Methionine	Phenylalanine	Threonine	Valine
L. H.	0.2	13.5	1.8	2.3	0.1	0.7	0.1	13.2	24.0
I. T.	0.7	19.5	6.7	2.0	4.9	7.4	10.5	29.9	8.9
J. Co-II	1.5	4.3	4.5	5.5	8.2	4.7	8.2	14.0	5.5

Undernourished Group									
Subject	Arginine	Histidine	Isoleucine	Leucine	Lysine	Methionine	Phenylalanine	Threonine	Valine
J. G.	0.0	10.0	0.7	1.2	3.9	1.6	2.7	9.0	2.5
C. C.	1.2	16.2	1.9	2.1	9.3	4.3	5.5	15.7	—
J. Co-I	1.5	4.3	4.5	5.5	8.2	4.7	8.2	14.0	5.0
J. Ch-I	0.1	19.4	1.0	3.6	8.6	7.0	8.6	27.5	7.3
J. Ch-II	0.3	8.7	1.6	2.8	4.1	2.8	5.6	12.2	1.6

amino acids, since the microbiological methods employed determine only the natural isomers.

In order to evaluate the "washing out" effect of parenterally administered fluids on body amino acids, 1,000 ml. of physiological saline was administered and the urine collected. The urinary excretion values of the nine essential amino acids determined are given in Table II. It will be seen that histidine is generally excreted in greater amounts in the normal group than in the malnourished patients. Although there is marked individual variation in the excretion of the remaining amino acids, in general, there is little loss due to the "washing out" effect of the saline.

Table III lists the urinary loss of amino acids following the intravenous administration of the amino acid solution. The values represent the percentage of the individual amino acid infused that is lost into the urine. The amount of amino acid spilled after the saline infusion has already been subtracted from that lost after the injection of the amino acid mixture. In both groups of

patients, histidine and threonine are excreted in greater amounts than the other amino acids studied.

### Discussion

Following a saline infusion, histidine was found to be excreted into the urine in relatively larger amounts than the other eight amino acids which were determined. In general, the amount excreted by normal individuals was greater than the amount excreted by the undernourished individuals. The reason for this selective leakage is as yet unexplained. It is known, however, that histidine is not considered an amino acid essential for the maintenance of nitrogen balance in normal man, at least over a short period of time.<sup>6</sup> It is suggested that man depleted of protein holds tenaciously to all the essential amino acids as well as those that are not considered essential (i.e., those which may be fabricated in the body). These data may be explained on the basis that man in normal nutrition is capable of synthesizing an



amount of histidine in excess of his immediate body needs so that after the saline infusion, some of the amino acid is spilled into the urine.

Earlier work has shown that little amino acid nitrogen was lost into the urine following the intravenous administration of this amino acid mixture.<sup>7</sup> From the present study it appears that there are relatively small amounts of the individual amino acids, arginine, isoleucine, leucine, lysine, methionine, phenylalanine and valine, excreted into the urine following their intravenous administration. The percentage of the administered threonine and histidine lost into the urine was greater than any of the other amino acids determined. This was true both for the normal and undernourished individuals. The data from the normal individuals are strikingly similar to those recently reported by Eckhart and Davidson,<sup>3</sup> using a similar amino acid mixture. Their observations permit no comparison with our undernourished group, as their studies were only on normal humans.

The reason for the selective wastage of histidine and threonine into the urine following an amino acid infusion is obscure at this time. Wright,<sup>10</sup> while studying the renal clearance of essential amino acids in dogs, noted that when a mixture of the ten essential amino acids was given at rates approaching maximum tolerance, there was no indication that the tubular reabsorption of threonine had even been approached. If the same holds true for man, the present studies suggest that threonine and perhaps histidine, when given in the concentration of the amino acid mixture used, are not as efficiently utilized as are the other essential amino acids. It will be noted in Table I that only phenylalanine is lower in amount, in the amino acid mixture given, than either histidine or threonine. This increases the significance of the loss of these two amino acids following infusion of the mixture.

The total amount of the individual amino acids retained (the difference between that given and that excreted) is, with the exceptions cited above, high when expressed as percentage of the administered amino acid. This is true without regard to the nutritional state of the subject. Whether or not man in normal nutrition catabolizes the administered amino acids, while man in an undernourished state uses the administered amino acids to build body tissue, cannot be ascertained at this time. This question is being further investigated.

## Summary

A comparison was made in eight subjects (four in normal nutrition and four in undernutrition) of the urinary wastage of nine essential amino acids during a four-hour period following the administration of an amino acid mixture, as contrasted with the urinary wastage during a four-hour period following the administration of physiological saline.

Histidine was excreted into the urine in greater amounts, following the saline infusion, by the normal group than by the undernourished group. In general, there was little loss of essential amino acids due to the "washing out" effect of the saline.

The percentage of the administered essential amino acids lost into the urine as amino acids, during a four-hour period following the administration of an amino acid mixture, was relatively low in both groups and, when histidine and threonine are omitted, ranged from 0 to 10.5 percent.

Although the reason for the selective urinary leakage of histidine and threonine is at present unexplained, several conjectures have been advanced and discussed.

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## NONSURGICAL BILIARY DRAINAGE

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# Anesthetic Deaths in Infants and Children

By M. Digby Leigh, M.D., and  
M. Kathleen Belton, M.D.

Vancouver, B.C., Canada



M. D. LEIGH

NO MORE depressing shadow can darken an operating room than that occasioned by the death of a child under anesthesia. It is some time before the gloom lifts. For the sorrowing and saddened parents, complete happiness and light-heartedness never return. The physician,

too, worries and spends some time reasoning it over with his frequently ignorant, unenlightening yet consoling confreres. When alone, he meditates and ponders. Often from his meagre acquaintance with anesthesia he draws an erroneous but comforting conclusion. To his own satisfaction his judgment is vindicated, his conscience is consoled.

It would be infinitely better to discuss the case frankly with an anesthesiologist who might be able to point out certain features which would avoid future failures and fatalities. For over 80 per cent of these so-called sudden deaths on the table are preventable. They are almost invariably due to a flagrant violation of some fundamental principle of anesthesiology. These cardinal truths have been outlined by the American Medical Association in "Fundamentals of Anesthesia," a book available to all.

Reflecting on a list of seventy deaths which occurred over a period of years on the operating table in a large, open general hospital, it was disturbing to note that twenty of the deaths were in children under ten years of age, a gross disproportion. It is the purpose here to present some of these cases as an illuminating study for all physicians so that we may not tumble unawares into the same pitfalls. It is unfortunate that we physicians have to confess this blindness. Perhaps it is not all our fault. Some of the onus should be borne by the medical schools for their crass ignorance of the essentials in the everyday practice of medicine. The rest of the burden is

on our own shoulders for our failure to maintain a progressive attitude. Medicine advances, and we must keep up with it.

In reviewing 6,250 operating room deaths which occurred in the United States during ten years, on the basis of figures taken from the U. S. Bureau of Statistics, Bishop startled the medical profession with the unpleasant observation that 542 of these deaths occurred during tonsillectomy. With such a large proportion, it is reasonable to believe that practically all physicians should be aware of one such incident, although a comforting memory often buries unpleasant thoughts. Among our list for this discussion, of twenty deaths in children under ten years of age, were three tonsillectomies.

## Case Reports

*Case 1.*—A little four-year-old girl was brought to the hospital for the removal of her tonsils one morning. She was undressed hurriedly since the mother had arrived late, and she fussed about her strange surroundings. The little patient had a rushed trip on a carrier through the hospital corridors. Screaming, she arrived at the operating room. Kindly coaxing by the nurses and doctor did not pacify the resisting howling child. Eventually she was held firmly and the open drop mask was applied to her face. Ethyl chloride was sprayed on the mask as an induction agent. A little struggle, a few rapid breaths, and then peaceful silence ensued. Open drop ether followed the ethyl chloride.

When the child was sufficiently anesthetized, the mouth gag was inserted between the teeth. The anesthesia was continued through a mouth hook suspended on the angle of the mouth. Ether, vaporized by a continuous flow of oxygen, maintained the level of anesthesia. Cyanosis was observed at this time, so the tongue was pulled forward, and the ether discontinued. The degree of cyanosis increased, however, and shortly a deathlike pallor spread over the face. Within five minutes the heart beat was imperceptible.

Then followed a hasty, vigorous, heroic course of treatment on this apparently lifeless body. In rapid succession an endotracheal tube was inserted, artificial respiration was commenced, coramine was given intravenously and epinephrine by the intracardiac route. All these measures failed in their purpose of resuscitation. They were too late. This underscores the old adage that prevention is better than cure.

Why did this apparently healthy child die? The autopsy report showed congenital atelectasis of the lower part of the left upper lobe of the lung. Everyone apparently was satisfied that the pathologist had revealed the cause of death. But the discerning anesthesiologist would not be satisfied. He would know that today the thorax can be opened widely without fear of fatality or without even a trace of cyanosis. What could have produced this extreme anoxia, severe enough to kill? Could it have been aspiration of solid food or

Presented at the thirty-third annual session of the Michigan State Medical Society at Detroit, September 24, 1948.



liquid gastric contents? Could it have been laryngospasm from irritating ether? Could it have been a mechanical block due either to large tonsils or to a widely opened mouth gag? Could it have been an overdose of anesthetic agent? All of these, if recognized, could have been corrected early and a fatal issue avoided.

*Case 2.*—A boy, aged ten years, scheduled for tonsillectomy, was anesthetized in a similar manner to that in Case 1, except that the level of anesthesia was maintained with a slightly different method. In place of the mouth hook pendent on the corner of the mouth, a soft rubber No. 14 French urethral catheter was introduced through the nose and glottis into the trachea. Ether, vaporized with a continuous flow of oxygen, was delivered into the trachea through this catheter. During the removal of the tonsils, periods of cyanosis were frequent. This was the time to investigate and to act promptly. Instead the operation was continued. By that time the cyanosis had been shaded gray by an ominous foreboding pallor. The pulse was impalpable.

Again the same extravagant but tardy treatment was instituted—coramine, endotracheal intubation, artificial respiration with 100 per cent oxygen, and intracardiac epinephrine—all useless at this late moment. The patient was irrevocably, irretrievably and hopelessly dead. Resurrection is rare in reality.

The pathologist's report was not as helpful this time, for it did not reveal any unusual or significant pathologic condition. What, then, was the cause of death? Could the anoxia have been due to an inadvertent or accidental flow of nitrous oxide in place of oxygen? This could not have occurred since no nitrous oxide tank was attached to the anesthetic apparatus. Could the anoxia have been caused by a partial blocking of the trachea or glottis either with clotted blood or with the catheter? Could it have been due to laryngospasm? Yes, it could have originated from any of the last three. Whichever the cause, early timely correction would have saved this life.

*Case 3.*—This was another fatality during tonsillectomy in a seven-year-old boy. It was virtually indistinguishable from Case 1, and the details do not require repetition. There were the same errors of management with the same grim dire consequence.

All these losses are chargeable to anoxia brought on by the inefficacy of the mechanics of respiration. All three could have been forestalled effectually with competent skill and knowledge of the science of anesthesiology.

*Case 4.*—A female infant, aged one month, required a cheiloplasty or cleft lip repair. She was pale, underweight, and undernourished. Avertin, 90 mg. per kg. of body weight, was instilled rectally. Avertin has little pain-relieving qualities unless given in large, dangerously depressing doses. For this reason, open drop ether and then ether and oxygen insufflation through a mouth hook were required to supplement the avertin. About forty-five minutes after the initiation of the op-

eration, cyanosis, pallor and respiratory arrest occurred. Immediately, artificial respiration, carbogen inhalations and adrenal cortical extract were administered without success. The infant was dead.

Again an unrevealing pathological report did not help. It is surmised that death was caused either by one of the many common causes of respiratory difficulty, mentioned in the first three cases, or by shock from hemorrhage. It must be remembered that there is scarcely 500 c.c. of total blood in an infant one month old, and a 50 c.c. blood loss constitutes a tenth of the total quantity. In these patients we prefer to transfuse blood as it is being lost.

*Case 5.*—This boy, aged three and a half years, was undergoing removal of a thyroglossal cyst. There was considerable stridor and stertor and indrawing of the suprasternal notch throughout the open drop ether anesthesia. The anesthesiologist failed to insert an oropharyngeal airway, which might have overcome the partial obstruction to respiration. Nor, in spite of the slight cyanosis, did he insert an endotracheal tube. After an hour and a half of the operation, the patient's condition deteriorated markedly. All treatment failed to restore the color, and the patient died.

The autopsy report stated that there was pulmonary edema and atelectasis of the left lower lobe of the lung. The surgeon's report was interesting in this case; obviously he was trying to protect the anesthesiologist when he reported, "no evidence of obstruction to breathing. The anesthesia was administered carefully and diligently at all times. There was nothing in the operation which could account for shock. The child did not show the normal response to stimulants." Quite obviously the stridor and stertor and indrawing of the suprasternal notch are evidences of severe respiratory obstruction and should have been corrected early.

*Case 6.*—This infant, aged two years, had jabbed the point of a scissors into its eye. It was brought to the hospital, and the surgeon insisted on repairing the injury at once, in spite of the fact that an hour previously the child had eaten its dinner. The induction with ethyl chloride on an open drop mask was quiet. The ethyl chloride was followed by open drop ether. A moment later the child held its breath, commenced to retch and vomit, aspirated food, and died in spite of an immediate effort being made to hold its head down and provide gravity drainage.

How much better it would have been to have waited for the stomach to empty! There is always time if a life is involved. In this particular instance, the operation was not urgent enough to warrant such hazardous anesthesia, when a few hours' delay would have meant incomparably better anesthetic conditions.

*Case 7.*—A little boy, aged six years, had acute appendicitis. The rectal temperature was 103°, the pulse rapid, and vomiting incessant and copious. To diminish the acidosis and dehydration, 200 c.c. of 5 per cent glucose in distilled water were given intravenously be-

fore operation. Morphine, gr. 1/12, and atropine, gr. 1/300, were injected hypodermically one hour before operation. For anesthesia, cyclopropane with an absorption in circuit method was utilized.

Thirty minutes after the inception of the operation, the boy stopped breathing. His face paled. Artificial respiration was applied without delay. Intravenous coramine and epinephrine followed. There was no response. Intermittent manual compression of the heart was carried on through an incision in the diaphragm in an effort to sustain an artificial circulation. After one hour the child was declared dead.

What was the cause of death? Certainly it was not the acute appendicitis. Quite possibly an overdose of cyclopropane, with respiratory and cardiac arrest or ventricular fibrillation with concomitant cardiac failure, was the mechanism responsible for the death of this patient. However, sudden death with no premonitory or admonishing signs is rare in cyclopropane anesthesia. Closer observation of the pulse might have detected cardiac irregularities earlier, and another anesthetic agent, such as ether, might have been substituted before it was too late.

Among other operative deaths in this list of twenty were deaths during a skin graft, a herniorrhaphy, a lobectomy, a spinal fusion, and in three neurosurgical cases. The train of events preceding most of them would be a repetition of the experiences already related. Most of the deaths were the outcome of respiratory involvement, either from obstruction or from overdosage with anesthetic agents. A few were due to circulatory failure or to shock caused by blood loss without blood replacement.

One can reiterate safely that in general practice fully 80 per cent of the fatalities in infants and children on the operating room table are primarily respiratory deaths. To avoid embarrassments, blunders, and tragedies, it is advisable to become "respiration-conscious," that is, to think first and always of the respiration in the unconscious or anesthetized patient. The physician must learn to recognize obstruction to breathing early—noisy breathing or indrawing of the chest on inspiration should be a warning. It can be relieved by lifting up the chin and by pulling the tongue away from the tonsils and posterior pharyngeal wall, or by inserting an oropharyngeal airway properly. Debris and blood must be kept out of the pharynx. One should never give an anesthetic, if it can be avoided, for at least five or six hours after a meal. Even ingested milk curdles and becomes a solid. Finally, every physician should have an otolaryngologist or anesthesiologist teach him how to introduce an endotracheal tube into the trachea.

This whole field, the science of anesthesiology, is comparatively new, and many physicians may not know some of the more recent advances. No one should be ashamed to inquire; it is the sign of an active intelligence. Furthermore, the price of pride may be persecution or prosecution.

If one fails with the above measures, then he has not learned his lessons well. He should go back, observe, and try again. It is the physician who is usually at fault—not the anesthetic agent, not the method, and not the apparatus.



### STRICTLY MEDICAL

If a man reaches the age of sixty with no organic diseases, it doesn't matter how he has lived. He has proved beyond a doubt that his life's plan was exactly right for him!

Let's say it another way. If you are sixty years old and have no organic diseases, then no matter what any doctor tells you, you have lived the right way for you.

So, having reached the age of sixty in good health, don't let any dietitian, any sun ray fan, any vegetarian, and devotee of exercise, induce you to change your way of living to his way of living! You have proved your case. Give him the laugh and continue to eat cucumber sauce on your ice cream, if that is what you have always done.

But remember one thing! When you have reached sixty, you are going down hill! You have passed your physical peak. You are not as good as you used to be, but plenty good at that.

Don't change your way of life, but slow down a bit. If you have taken a cold shower every morning of your life, go right ahead taking cold showers but don't have them quite so cold.—Editorial, Roe Fulkerson, *Kiwanis Magazine*, July, 1949.

### VOLVULUS OF THE ILEUM

(Continued from Page 859)

dition within the baby prior to its birth could be tolerated and that the child could continue to live through intervening weeks until delivery.

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# Editorial

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## ATLANTIC CITY MEETING

THE ANNUAL Session of the American Medical Association at Atlantic City, June 5 to 10, was outstanding and significant in the history of the American Medical Association. The attendance was well over 14,000 doctors, and every means of transportation and housing was exhausted in carrying the crowds.

The first item of business at the first meeting of the House of Delegates was the announcement by the Board of Trustees that the editor of *JAMA* had been placed under restrictions in regard to writing, talking and radio appearances on all matters controversial in nature. He is to confine his activities to scientific affairs and to the editing of the *Journal*. The Board announced that the editor would retire at an opportune time. He is sixty years of age, has served the American Medical Association thirty-seven years, and his editorial genius has made the *Journal of the American Medical Association* the greatest medical journal of all time. It will remain as a monument to his unusual capacity. His activities in the social-economic field have irritated many people, and a movement has been growing for several years to remove him from the apparent position of spokesman for the American Medical Association.

An equally important subject is the fight against socialized medicine. Attendance at the AMA House of Delegates meetings impresses one with the seriousness of this fight and the earnestness with which the medical profession is opposing the socializing efforts from government and other sources which seem to have unlimited campaign and propaganda money.

Two English people were on the program and talked about the situation in England. One was a doctor who, after serving throughout the war, went back into practice. As has been the custom in England, he bought a practice, paying \$12,000 for it. He did not have the money, but a medical practice is a security which the banks will recognize, and he was able to make a loan, payable in ten yearly installments. Soon after this transaction, socialized medicine came. A great majority of the doctors voted not to co-operate, but a sufficient minority indicated co-operation to give the gov-

ernment a chance to try the scheme. The buying and selling of medical practices was prohibited, but the government offered to purchase all these practices from the doctors who held them *if the doctor signed up for service under the new act before July 5, 1948*. It was this restriction on the profession that put the matter over and secured approximately 90 per cent of the doctors' signatures. Soon this doctor found practice intolerable and left England, along with some 500 or 600 others. He came to America and will practice in the United States. He has taken out his first papers.

An English publisher, author, and journalist, Cecil Palmer, gave a long talk about the situation in England. He is not a doctor but he pictured the practice as most unsatisfactory from the viewpoint of good medicine and from the experience of doctors who must live under it.

At almost every meeting somebody discussed either the situation in England or what we are facing in America. An opinion seems to be growing among our doctors that we have won this fight, that the government will not dare to raise more taxes to carry on this program, and therefore we may relax. This is the worst possible attitude for us to take. We have now projected a tremendous barrage of letters opposed to socialized medicine into Washington, and if we let up a moment and the pressure slackens, the socializers might grasp the opportunity to pass possibly not the Wagner-Murray-Dingell Bill or the new Administration Bill but some other or a series of apparently innocuous measure, which would start the program going, and there are many of these bills before the Congress. The fight seems to be going our way—let us keep on pushing.

We know this is repetition, but it is done for a purpose. We *must not* be caught unawares, as was the British medical profession.

## THE TIDE IS TURNING

ONLY A FEW years ago, when the American Medical Association was defending itself under the Sherman Antitrust Law, and Thurman Arnold was lecturing about what he was proving to the Grand Jury about the great Medical Trust,

(Continued on Page 876)

## War Against the Welfare State

As members of the medical profession we definitely have two obligations to our patients: first as doctors, secondly as citizens.

During this past seven months the Society membership has been more closely drawn together than ever before, due to our public educational campaign. As a group and as individual members, we have sought increased knowledge in those medical socio-economic developments which may affect the medical welfare of our people and our entire professional future. By reason of bureaucratic attack upon our profession, we have been forced to think about the position of sickness and health in a political world. Doctors have been compelled to become political economists.

We know that the present system of medical care is not ideal for our entire population. We know that the solution of this problem is to fix it, modify it, and improve it—not to throw it out for some imitation of medico-sociological philosophies of other countries.

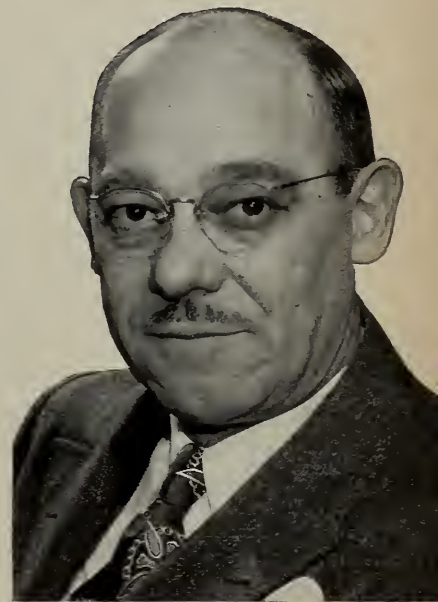
Many of us are putting forth great effort to carry our ideas, ideals, and information regarding the great accomplishments of modern medical science to patients, friends, and the general public. We must continue this at an ever increasing tempo if we wish to protect this country from becoming a completely socialistic state.

In the final analysis, we know that we are in a fight for freedom. Bureaucratic administration with its directives, rules and regulations will most certainly attack and curtail the freedom of our citizens.

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



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papers and magazines were full of articles strongly critical of the unpopular American Medical Association. Articles in favor of the medical profession and its organizations were as scarce as hen's teeth.

In the recent past, since the Wagner-Murray-Dingell Bills and their ilk have been the spearhead of a modern socializing trend, the same picture has been repeated. Columnists and politicians have sounded off about the inadequacies of the medical profession and its failure to prevent the "rejection of five million young men by the draft examinations." The public has been told that *it is demanding* a comprehensive health care administered by the government. The tension has been continuous and to the almost complete exclusion of any defense of the present system of medical practice, which has been too outstandingly good to suit the host of job-seeking bureaucrats.

For five years the Michigan State Medical Society has advocated an aggressive campaign of publicity, telling our medical ideals, presenting the truth about misleading and misquoted figures of illness, death, draft rejection, and offering a program to the American people which would more fully meet the increasing requirements for better distribution and more economic methods of paying for medical service. The ensuing plans were developed into national legislative proposals, and we began educating not only the public but the Congress. Appraisal of the national magazines for the past few months makes a very encouraging picture.

The tide is turning. Good articles are appearing in the great popular magazines practically weekly. On May 14, 1949, the *Saturday Evening Post* started a series of three articles by Steven M. Spencer on socialized medicine in Great Britain. "How Britain Likes Socialized Medicine" was the first and was a strong picture of the condition in England, telling the favorable and the unfavorable news. Some people like it, a few doctors like it, but the trend to a greater degree is to socialism. This number of the *Post* also had an editorial debunking the story of 5,000,000 rejectees and how they could have been benefited by state medicine. Our story was again told and the ridiculousness of the argument stressed.

On May 21, 1949, Mr. Spencer told "How the British Doctors like Socialized Medicine." He told of the frustrations, the limitations, the eternal form filling, permits for more food, for wigs, for glasses, for everything covered by over 150 different forms.

He told of shrinkage of professional income from \$16,000 to \$2,400 a year. The doctors are resigning and leaving the country.

The *Post* for May 28, 1949, contained the third article by Mr. Spencer: "Do You Really Want Socialized Medicine?" He tells what a person really needs to know before deciding on the Truman proposal. This paper is a clear and unbiased presentation of the subject. How one can decide "yes" is a mystery.

*Collier's* for May 14 and 21, 1949, contains two articles by Howard Whitman on "The American Medical Association." This article is a critical study of the American Medical Association, its politics, its officers, its members, and the 15,000 or 20,000 who don't agree with the American Medical Association policies. We think this figure is greatly exaggerated if what is meant is the voluble minority who are heading the Physician's Forum and such activities. But if what is meant is the number of members in any organization who have different or divergent views on certain subjects of dispute or on subjects not yet sufficiently studied and crystalized, then the number is probably too small. The Association is made up of 144,000 persons who are trained to be, and of necessity must be, individualists. There must be differences of opinion and differences of politics. The second article is mostly about Dr. Fishbein and is an unnecessary and poorly advised airing of many situations which are matters of honest differences of opinion, but which are being resolved. The action of the Board of Trustees announced at Atlantic City in June, 1949, bears out this statement. These two articles are in the main favorable to medical ideals and economic progress, but they left us without enthusiasm.

This same number of *Collier's* contains an editorial, "Medicine and Politics Don't Mix." Quotations include: "It would be a tragic blunder both on the part of the advocates of governmentally hired doctors and on the part of organized medicine to allow this issue to degenerate into a political quarrel." "We think it would be very wise for Congress to create a truly competent unpolitical commission with which the doctors could in dignity co-operate."

Arthur Nicholson in the *Saturday Evening Post* for June 18, 1949, has a very clear and comprehensive study of the voluntary methods of health care, Blue Cross, Blue Shield, and the insurance companies. He shows figures to prove that well

over a third of the population is now covered by voluntary health service—some service plans, some indemnity, and some a mixture. He shows the development of the medically sponsored programs and the predictions by governmental officers that it could not be sold unless it was made compulsory. This article is well worth reading.

*Look Magazine* for June 21, 1949, has outdone all the other magazines in its presentation of the subject. It contains a well-illustrated article on "Socialized Medicine" by Senator Murray, with underscoring and marginal notes by Roscoe L. Sensenich, M.D., president of the American Medical Association. The article covers four and a half pages with apt illustrations. This is one of the best expositions we have seen.

And the public press? The stories, editorials and articles which are appearing are too numerous even to be listed. And to copy or comment would be repetition, and we do not have the space. Suffice it to say that we seem to be gaining in good publicity and seem to have arrived at the place where we can look for a favorable outcome. But, that is predicated only on keeping up the fight. This issue is not static. It must keep going forward or we are defeated. If the people's pressure on Congress is relaxed one iota, there is no telling what measure may be passed, and we would lapse into bondage as did the British Medical Association.

Eternal vigilance is the price, and we cannot afford less. Let us keep up the good work.

## ROSTER NUMBER

THE JULY number of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY has become the roster number. In this JOURNAL we publish the complete roster of the Society, as we have done for a number of years. Last year and again this year the cover is a map with information as to the number of doctors in each county. We hope this is of value to our members. The roster serves as a ready reference, and contains the names of all members certified to the Executive Offices on or before June 4, 1949. This list has been kept open two months beyond the By-laws' provision, in order to give everyone a chance to be "counted."

Also this JOURNAL contains for the first time a roster of the Woman's Auxiliary, approximately 1,750 names. This set of rosters has been a tremendous undertaking by the executives, requiring many hours of extra work, and we are sure the members and the ladies will be pleased.

## PHYSICAL MEDICINE AND REHABILITATION

THE RECENT international conflagration was both destructive and creative in the field of medical science. Because of the manpower shortage in the armed forces, the necessity was paramount for returning injured soldiers to activity with a minimal amount of convalescence. Hence occurred an extensive development of departments of physical medicine and rehabilitation as integral parts of hospital organizations. The lessons learned from the difficulties as well as values of such types of service are rapidly being adapted to our civilian life in progressive hospitals. The modern medical establishment is introducing the medical staff to the department of physical medicine and rehabilitation, with trained therapists, and frequently under the direction of a physiatrist, a specialist trained in the use of physical agents, namely, the employment of physical and other effective properties of light, heat, cold, water, electricity, massage, manipulation and exercise and mechanical devices for physical and occupational therapy in diagnosis and treatment of disease.

The past one hundred years have witnessed three different eras in medical progress, namely, diagnostic medicine for the first fifty years, preventive medicine for the past fifty years, and now *restorative medicine*, a type of procedure necessary in the salvage of wreckage left behind by the various medical mysteries such as hemiplegias, poliomyelitis, cerebral palsy, multiple sclerosis, arthritis and a host of little-known diseases.

Training in physical medicine has been assiduously avoided by undergraduate and postgraduate medicine. With the large numbers of physicians and medical technicians being exposed to restorative procedures during the recent world conflict, a great demand has arisen for information in that field. These same individuals now request and expect information and departments of physical medicine in their own hospitals. The first instruction course in physical medicine in this state was held in Bay City on February 4, 1948, under the joint auspices of the Michigan State Medical Society, Wayne University College of Medicine, Grace Hospital Department of Physical Medicine and Rehabilitation, Bay County Medical Society and Bay City General Hospital. The latter has established a typical small but fully equipped hospital department of physical medicine

(Continued on Page 902)



# Michigan State Medical Society

## The 84th Annual Session and Postgraduate Conference and Cancer Control Day

Pantlind Hotel-Civic Auditorium, Grand Rapids,  
September 21-22-23-24, 1949

### *Preliminary Program*

#### WEDNESDAY MORNING

September 21, 1949

##### *First Assembly*

Black and Silver Ballroom, Civic Auditorium

A.M.

7:30 Registration—Civic Auditorium, Exhibit Floor

8:30 Exhibits Open—Civic Auditorium, Exhibit Floor

9:00 "Treatment of Osteomyelitis as Modified by Antibiotic and Chemotherapy"

DALLAS B. PHEMISTER, M.D., Chicago, Illinois  
*Professor of Surgery Emeritus, The University of Chicago; Attending Surgeon, University of Chicago Clinics.*

9:30 "Types of Diabetes Mellitus and their Management"

ARTHUR R. COLWELL, M.D., Evanston, Illinois  
*Associate Professor of Medicine and Director of Medical Specialty Training, Northwestern University Medical School.*

10:00 INTERMISSION TO VIEW EXHIBITS—Always Something New

11:00 "The Anesthesiologist is Prepared to Anesthetize the Surgical Patient, to Aid in Differential Diagnosis of Pain Paths and to Resuscitate the Patient"

JOHN S. LUNDY, M.D., Rochester, Minnesota  
*Head of Section on Anesthesiology, Mayo Clinic, Rochester, Minn.; Professor of Anesthesiology, The Mayo Foundation, Graduate School, University of Minnesota.*

11:30 "The Diagnosis and Treatment of Cutaneous Malignancy"

EARL D. OSBORNE, M.D., Buffalo, New York  
*Professor of Dermatology & Syphilology, University of Buffalo School of Medicine; Founder and Secretary-Treasurer, American Academy of Dermatology and Syphilology.*

12:00 End of First Assembly

INTERMISSION TO VIEW EXHIBITS

#### —Program of Sections—

#### WEDNESDAY NOON

September 21, 1949

12:15 p.m. to 1:30 p.m.  
(luncheon meetings)

##### SECTION ON DERMATOLOGY AND SYPHILOLOGY

(Continental Room, Pantlind Hotel)

"The Treatment of Eczema Based on Etiology"  
EARL D. OSBORNE, M.D., Buffalo, New York

##### SECTION ON ANESTHESIA

(Rooms 322-324, Pantlind Hotel)

"The Use of Dextran, Periston and Gelatin for Support of the Circulating Volume in the Cardiovascular System during Anesthesia and Operation"

JOHN S. LUNDY, M.D., Rochester, Minnesota

##### SECTION ON UROLOGY

(Room 222, Pantlind Hotel)

"1. Trans-Midline Ureteroureterostomy  
"2. Postoperative Urinary Incontinence  
"3. The Clinical Application of Urecholine"  
EDWIN DAVIS, M.D., Omaha, Nebraska

##### SECTION ON GYNECOLOGY AND OBSTETRICS

(Ballroom, Pantlind Hotel)

"Surgical Problems in Pregnancy"  
JOSEPH L. BAER, M.D., Chicago, Illinois

# PRELIMINARY PROGRAM

## WEDNESDAY AFTERNOON

September 21, 1949

### Second Assembly

Black and Silver Ballroom, Civic Auditorium

P.M.

- 1:30 "Pulmonary Infections with Histoplasma in Children"  
WARREN E. WHEELER, M.D., Columbus, Ohio  
*Professor of Pediatrics, Ohio State University College of Medicine*
- 2:00 "Pitfalls in Urological Diagnosis"  
EDWIN DAVIS, M.D., Omaha, Nebraska  
*Professor, Urological Surgery, University of Nebraska College of Medicine.*
- 2:30 "Prolonged Labor"  
JOSEPH L. BAER, M.D., Chicago, Illinois  
*Professor Emeritus, Gynecology and Obstetrics, University of Illinois (Rush); Senior Attending Gynecologist and Obstetrician, Michael Reese Hospital, Chicago.*
- 3:00 INTERMISSION TO VIEW EXHIBITS—  
An Amazing Display
- 4:00 "Moles and Melanomas"  
ARTHUR P. STOUT, M.D., New York City  
*Professor of Surgery, Columbia University.*
- 4:30 "Surgical Management of Malignancy of the Ampullary Region"  
JOHN M. WAUGH, M.D., Rochester, Minnesota  
*Associate Professor of General Surgery, Mayo Foundation.*
- 5:00 End of Second Assembly
- 5:00 Discussion Conferences in Surgery, Medicine, General Practice, Obstetrics, Pediatrics, Dermatology, and Anesthesiology.  
(See Page 381)

## WEDNESDAY EVENING

September 21, 1949

### General (Public) Meeting

Ballroom, Pantlind Hotel

- 8:30 Officers' Night  
Presidential Address by E. F. Sladek, M.D.,  
Traverse City  
Biddle Oration
- 10:00 End of General Meeting

## THURSDAY MORNING

September 22, 1949

### Third Assembly

Black and Silver Ballroom, Civic Auditorium

A.M.

- 8:30 Registration—Civic Auditorium, Exhibit Floor  
Exhibits Open—Civic Auditorium, Exhibit Floor
- 9:00 "Early Diagnosis of Carcinoma of the Uterus"  
FREDERICK H. FALLS, M.D., Chicago, Illinois  
*Professor of Obstetrics and Gynecology, College of Medicine, University of Illinois.*

9:30 "Deep Infections of the Neck"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

*Hospital Staffs of Indianapolis University Medical Center, Methodist Hospital, Indianapolis General Hospital, St. Vincent Hospital and St. Francis Hospital.*

10:00 INTERMISSION TO VIEW EXHIBITS—  
Something To Interest You

11:00 "Effect of Prenatal Factors on Survival of New-born Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

*Professor and Head of Department of Pediatrics, University of Kansas School of Medicine.*

11:30 "A New Principle in the Control of Communicable Diseases"

JOHN E. GORDON, M.D., Boston, Massachusetts

*Professor of Preventive Medicine and Epidemiology, Harvard School of Public Health.*

12:00 End of Third Assembly

INTERMISSION TO VIEW EXHIBITS

## —Program of Sections—

## THURSDAY NOON

September 22, 1949

12:15 p.m. to 1:30 p.m.  
(luncheon meetings)

### SECTION ON PEDIATRICS

(Continental Room, Pantlind Hotel)

"Pulmonary Disease in Newborn Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

### SECTION ON SURGERY

(Ballroom, Pantlind Hotel)

"Lumbar Hernia"

MAX THOREK, M.D., Chicago, Illinois

### SECTION ON OTOLARYNGOLOGY

(Schubert Room, Pantlind Hotel)

"Endaural Radical Mastoidectomy for Chronic Mastoiditis"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

### SECTION ON OPHTHALMOLOGY

(Room 222, Pantlind Hotel)

"Ocular Allergies"

RALPH O. RYCHENER, M.D., Memphis, Tenn.

### SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

(Sadler Lounge, Pantlind Hotel)

"Epidemiology—Old and New"

JOHN E. GORDON, M.D., Boston, Massachusetts



# THURSDAY AFTERNOON

September 22, 1949

## Fourth Assembly

Black and Silver Ballroom, Civic Auditorium

P.M.

- 1:30 "Indications for Surgery in Gall-bladder Disease"  
ROBERT M. ZOLLINGER, M.D., Columbus, Ohio  
*Professor and Chairman, Department of Surgery, Ohio State University.*
- 2:00 "Use of Steroid Hormones in Bone Disease of Aging People"  
EDWARD C. REIFENSTEIN, JR., M.D., New York City  
*Clinical Endocrinologist, Sloan-Kettering Institute; Clinical Research Consultant, Ayerst, McKenna & Harrison.*
- 2:30 "Glaucoma in General Practice"  
RALPH O. RYCHENER, M.D., Memphis, Tennessee  
*Associate Professor of Ophthalmology, University of Tennessee.*
- 3:00 INTERMISSION TO VIEW EXHIBITS—  
Your Friends Await You
- 4:00 "Indications and Methods for Terminating Pregnancy in the Last Trimester"  
WILLIAM J. DIECKMANN, M.D., Chicago, Illinois  
*Mary Campau Ryerson Professor, University of Chicago, Department of Obstetrics and Gynecology; Chief of Service Chicago Lying-In Hospital; Attending Gynecologist, Albert Merritt Billings Memorial Hospital.*
- 4:30 "Impending Death Under Anesthesia"  
MAX THOREK, M.D., Chicago, Illinois  
*Professor of Surgery, Cook County Graduate School of Medicine; Surgeon in Chief, American Hospital of Chicago; formerly Attending Surgeon, Cook County Hospital; Founder and General Secretary of the International College of Surgeons.*
- 5:00 End of Fourth Assembly
- 5:00 Discussion Conference in Surgery, Medicine, Otolaryngology, Gynecology and Obstetrics, Ophthalmology, Public Health, and Preventive Medicine  
(See Page 881)

# THURSDAY EVENING

September 22, 1949

## STATE SOCIETY NIGHT

Ballroom, Pantlind Hotel

- 10:30 An evening of entertainment for all registrants, their ladies and guests.  
Dancing and floor show.  
Host: Michigan State Medical Society.  
(Admission by card furnished to all registrants)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

# FRIDAY MORNING

September 23, 1949

## Fifth Assembly

Black and Silver Ballroom, Civic Auditorium

A.M.

- 8:30 Registration—Civic Auditorium, Exhibit Floor  
Exhibits Open—Civic Auditorium, Exhibit Floor
- 9:00 "Basic Principles in the Treatment of Blood Dyscrasias"  
WILLIAM B. CASTLE, M.D., Boston, Massachusetts  
*Professor of Medicine and Chairman of Department of Medicine, Harvard Medical School.*
- 9:30 "Recent Advances in the Study of Venereal Diseases"  
JOSEPH E. MOORE, M.D., Baltimore, Maryland  
*Associate Professor of Medicine and Adjunct Professor of Public Health, Johns Hopkins Hospital, Baltimore, Maryland.*
- 10:00 INTERMISSION TO VIEW EXHIBITS—  
They Close at 3:30 p.m. TODAY
- 11:00 "The Diagnosis and Treatment of Common Diseases of the Anorectum"  
HARRY E. BACON, M.D., Philadelphia, Pennsylvania  
*Professor and Head of Department of Proctology, Temple University Medical School and Hospital; Head of Department, St. Mary's Hospital.*
- 11:30 "Iatrogenicity in Medicine"  
FRANKLIN G. EBAUGH, M.D., Denver, Colorado  
*Professor of Psychiatry, Head of Department, University of Colorado Medical Center.*
- 12:00 End of Fifth Assembly
- INTERMISSION TO VIEW EXHIBITS

# —Program of Sections—

## FRIDAY NOON

September 23, 1949

12:15 p.m. to 1:30 p.m.

(luncheon meetings)

## SECTION ON MEDICINE

(Ballroom, Pantlind Hotel)

### "The Causes and Instance of Salt Deficiency"

JOHN P. PETERS, M.D., New Haven, Connecticut

## PRELIMINARY PROGRAM

### SECTION ON GENERAL PRACTICE

(Furniture Club, Pantlind Hotel)

#### "Newer Trends in the Management of Large Bowel Surgery"

HARRY E. BACON, M.D., Philadelphia, Pennsylvania

### SECTION ON NERVOUS AND MENTAL DISEASES

(Schubert Room, Pantlind Hotel)

#### "The Place of Psychiatry in Industry"

LEONARD E. HIMLER, M.D., Ann Arbor, Michigan

*Associate Professor of Mental Health, School of Public Health, University of Michigan; Medical Director, Mercywood Hospital, Ann Arbor, Mich.*

### SECTION ON RADIOLOGY

(Continental Room, Pantlind Hotel)

#### "Contact Roentgen Therapy for Superficial Lesions"

URSUS V. PORTMANN, M.D., Cleveland, Ohio

## FRIDAY AFTERNOON

### September 23, 1949

#### Sixth Assembly

Black and Silver Ballroom, Civic Auditorium

P.M.

#### 1:30 "Acute Surgical Abdomen"

ARNOLD S. JACKSON, M.D., Madison, Wisconsin  
*President, American Goiter Association; Secretary, International College of Surgeons, United States Chapter.*

#### 2:00 "Importance of Breast Feeding"

ROBERT L. JACKSON, M.D., Iowa City, Iowa  
*Associate Professor, Department of Pediatrics, State University of Iowa.*

#### 2:30 "Cancer of the Breast"

URSUS V. PORTMANN, M.D., Cleveland, Ohio  
*Director of Therapeutic Radiology, Cleveland Clinic.*

#### 3:00 INTERMISSION TO VIEW EXHIBITS—Your Last Opportunity

#### 3:30 "The Surgical Treatment for Coarctation of the Aorta"

ROBERT E. GROSS, M.D., Boston, Massachusetts  
*Ladd Professor of Children's Surgery, Harvard Medical School, Boston, Mass.; Surgeon-in-Chief, The Children's Hospital, Boston.*

#### 4:00 "Causes and Treatment of Lower Nephron Nephrosis"

JOHN P. PETERS, M.D., New Haven, Connecticut  
*John Slade Ely Professor of Medicine, Yale University School of Medicine; Attending Physician, New Haven Hospital; Consulting Physician, Norwalk and Stamford Hospitals.*

4:30 End of Sixth Assembly

4:30 Discussion Conferences in Surgery, Medicine, General Practice, Radiology, Pediatrics, Nervous and Mental Diseases, Syphilology, and Pathology.  
(See below)

### END OF SCIENTIFIC ASSEMBLY AND OF 1949 ANNUAL SESSION

CANCER DAY PROGRAM—Page 882

## DISCUSSION CONFERENCES

### TWENTY QUIZ PERIODS

Wednesday, September 21, 5:00 to 6:00 p.m.

*Surgery:* Dallas B. Phemister, M.D., Chicago, and John M. Waugh, M.D., Rochester, Minn.—Black and Silver Ballroom, Civic Auditorium.

*Medicine:* Arthur R. Colwell, M.D., Evanston, Ill.—Ballroom, Pantlind Hotel.

*Anesthesiology:* John S. Lundy, M.D., Rochester, Minn.—Room 324, Pantlind Hotel.

*Dermatology:* Earl D. Osborne, M.D., Buffalo—Room 222, Pantlind Hotel.

*Obstetrics:* Joseph L. Baer, M.D., Chicago—Schubert Room, Pantlind Hotel.

*Pediatrics:* Warren E. Wheeler, M.D., Columbus, O.—Continental Room, Pantlind Hotel.

*General Practice:* Arthur P. Stout, M.D., New York—Red Room, Civic Auditorium.

Thursday, September 22, 5:00 to 6:00 p.m.

*Obstetrics and Gynecology:* Frederick H. Falls, M.D., Chicago, and William J. Dieckmann, M.D., Chicago—Sadler Lounge, Pantlind Hotel.

*Otolaryngology:* Ralph J. McQuiston, M.D., Indianapolis—Mezzanine Lounge, Pantlind Hotel.

*Public Health and Preventive Medicine:* John E. Gordon, M.D., Boston—Parlors B and C, Civic Auditorium

*Surgery:* Robert M. Zollinger, M.D., Columbus, and Max Thorek, M.D., Chicago—Black and Silver Ballroom, Civic Auditorium.

*Medicine:* Edward C. Reifenshtein, Jr., M.D., New York City—Red Room, Civic Auditorium.

*Ophthalmology:* Ralph O. Rychener, M.D., Memphis, Tenn.—Room 324, Pantlind Hotel.

Friday, September 23, 4:30 to 5:30 p.m.

*Medicine:* William B. Castle, M.D., Boston, and John P. Peters, M.D., New Haven, Conn.—Ballroom, Pantlind Hotel.

*Syphilology:* Joseph E. Moore, M.D., Baltimore—Mezzanine Lounge, Pantlind Hotel.

*General Practice:* Harry E. Bacon, M.D., Philadelphia—Furniture Club, Pantlind Hotel.

*Nervous and Mental Diseases:* Franklin G. Ebaugh, M.D., Denver, Col., and Leonard E. Himler, M.D., Ann Arbor, Mich.—Schubert Room, Pantlind Hotel.

*Surgery:* Arnold S. Jackson, M.D., Madison, Wis., and Robert E. Gross, M.D., Boston—Black and Silver Ballroom, Civic Auditorium.

*Pediatrics:* Robert L. Jackson, M.D., Iowa City—Red Room, Civic Auditorium.

*Radiology:* Ursus V. Portmann, M.D., Cleveland—Continental Room, Pantlind Hotel.



PRELIMINARY PROGRAM

WOMAN'S AUXILIARY  
CONVENTION

TENTATIVE PROGRAM

All activities not otherwise indicated will be held in the  
Pantlind Hotel, Grand Rapids

TUESDAY, SEPTEMBER 20

P.M.

- 6:30 Welcoming Dinner (Continental Room)  
8:00 Style Show (Continental Room)

WEDNESDAY, SEPTEMBER 21

A.M.

- 10:30 Pre-convention Board Meeting (Mezzanine  
Lounge, Pantlind Hotel)

P.M.

- 1:00 Luncheon (Schubert Room)  
6:30 Banquet. Honoring the National President, Mrs.  
David Allman of Atlantic City (Furniture Club)  
10:00 Open House and Reception. Honoring District  
Delegates and Presidents of the Woman's Aux-  
iliary and of the Michigan State Medical Society  
(Schubert Room)

THURSDAY, SEPTEMBER 22

A.M.

- 8:30 Organization Breakfast for District Directors.  
Sponsored by Organization Chairmen Mrs. Don  
Wright and Mrs. Oscar D. Stryker (President's  
Suite)  
10:00 Annual Board Meeting (Red Room, Civic Audi-  
torium)  
P.M.  
1:00 Annual Luncheon (Furniture Club)  
3:00 Post-convention Board Meeting (Furniture Club)

CANCER DAY

SATURDAY, SEPTEMBER 24, 1949

Ballroom, Pantlind Hotel

*Sponsored by the MSMS Cancer Control Committee, the  
American Cancer Society, Michigan Division, Inc., and  
the Michigan Foundation for Medical and Health Edu-  
cation, Inc.*

PROGRAM

A.M.

- 9:05 "Psychiatric Management of the Cancer Pa-  
tient"  
FRANKLIN G. EBAUGH, M.D., Denver, Colorado  
9:25 "The Indications and Limitations of X-ray and  
Radium Treatment for Cancer"  
URSUS V. PORTMANN, M.D., Cleveland, Ohio

- 9:45 "The Diagnosis and Management of the Leu-  
kemias"  
WILLIAM B. CASTLE, M.D., Boston, Mass.

- 10:15 "Cancer of the Thyroid"  
ARNOLD S. JACKSON, M.D., Madison, Wisconsin

- 10:40 "Embryomas of the Kidney in Childhood"  
ROBERT E. GROSS, M.D., Boston, Massachusetts

11:10 to

- 12:00 Questions and General Round Table Discussion  
Moderator: NORMAN F. MILLER, M.D., Ann  
Arbor, Chairman, Cancer Control Committee,  
Michigan State Medical Society.

P.M.

- 12:15 Subscription Luncheon (Furniture Club, Pant-  
lind Hotel)

HAVE YOU MADE YOUR  
HOTEL RESERVATIONS?

MICHIGAN STATE MEDICAL SOCIETY

84th Annual Session

Grand Rapids, September 21-22-23, 1949

As very few singles are available, registrants are requested to co-  
operate with the Committee on Hotels by sharing a room with  
another registrant.

J. R. Lentini, M.D., Chairman, Committee on Hotels,  
Michigan State Medical Society 84th Annual Session,  
c/o Pantlind Hotel, Grand Rapids, Michigan

Please make hotel reservation(s) as indicated below:

Hotel .....(1st choice)

Hotel .....(2nd choice)

.....Single Room(s)

.....Double Room(s) for .....persons

.....Twin Bedded Room(s) for.....persons

Arriving September .....hour.....A.M.....P.M.

Leaving September .....hour.....A.M.....P.M.

(Names and addresses of all applicants including person making  
reservation.)

Name Address City State

.....

.....

.....

.....

Date ..... Signature .....

Address ..... City .....

.....

# Committee Annual Reports

## ANNUAL REPORT OF THE COUNCIL, 1948-49

The Council had three sessions of nine days and the Executive Committee convened ten times (to September 17, 1949), a total of thirteen meetings up to the 1949 Annual Session of the Michigan State Medical Society. All matters studied and recommendations made by the Society's twenty-six Committees as well as The Council's own twenty-eight committees and all business of the Society were referred to The Council or to its Executive Committee for consideration, approval, and action. In February, 1949, the Executive Committee adopted a new "all-day session" scheduled for its monthly meetings, in order to handle the sharply increased activities of the Michigan State Medical Society.

### Membership

Members of the State Medical Society as of July 1 and as of December 31, from 1935 to 1949, are indicated in the following chart:

	1949	1948	1947	1945	1943	1941	1935
July 1.....	4455	4645	4536	4425	4661	4403	3410
December 31..		4960	4797	4686	4786	4621	3653

The figures for 1949 include 4,259 active members, 126 Emeritus and Life Members, 13 Retired Members, and 57 Associate Members.

The MSMS membership was at an all-time high as of December 31, 1948.

### Finances

Nine months each year the finances of the Michigan State Medical Society are reviewed by the Executive Committee. At the three meetings of the entire Council the financial picture is reviewed and the governing policies established. As a preliminary to all this, the Finance Committee reviews the monthly statements, the report of Ernst & Ernst and the expenditures before submitting their recommendations. It is also the duty of this Finance Committee with the aid of the executive office to prepare a yearly budget for the approval of The Council. Because of the multiplicity of activities of your society and the size of the yearly budget each member should carefully acquaint himself with the financial status of the Michigan State Medical Society and be quick to offer his suggestions. Your officers will be most appreciative.

As of June 27, 1949, 4281 members have paid society dues amounting to \$51,321.00. We feel this will be adequate for the usual maintenance of Society activities, and the reserves will be protected if not actually increased by December 31, 1949.

The \$25.00 assessment, at the same time, has added \$106,918.75 to the public education fund. The Council, after careful study, decided to institute the most vigorous program of public education possible. If necessary, the entire assets to be used for public relations, including the \$100,000.00 reserve, could be utilized. A planning committee was then appointed and with Hugh Brennenman's devotion to a crusade, the widely publicised CAP program gained rapid momentum. If expenditures continue for the remainder of the year at the current rate we might anticipate a balance of \$25,000.00. The CAP planning committee however have suggestions by which we may be able to curtail certain expenditures and show a balance of \$50,000.00. We mention this item of finances because, with reduced reserves, it will of necessity reduce the CAP activities next year unless the membership should want a greater assessment with no curtailment in the program.

The crowded condition of our headquarters is even worse than when we commented on it a year ago. Additional space in the Olds Tower is not available. Suit-

able property for lease or purchase has not been obtainable. The amount of money required, for a lease or purchase, with property values as they are in Lansing, would finance a rather extensive building program. The Michigan State Medical Society as of May 31, 1949, had \$125,035.13 as available cash. In addition there were \$59,476.60 available in bonds. We are still of the opinion that a building fund should be created and construction of a suitable headquarters considered.

We wish to mention again the Biddle Estate. The securities were converted to cash and \$25,317.75 were added to the Michigan Foundation for Medical and Health Education, Inc. This brings the entire fund to \$105,514.04 which is being so ably directed by Dr. E. I. Carr and will be reported elsewhere.

The Council authorized authenticating rating of the bonds held by the Michigan State Medical Society semi-annually which will be commented on in the report of the Treasurer, Dr. A. S. Brunk.

In all, 3616 members of the Michigan State Medical Society have paid the AMA special assessment for Public Education totaling \$90,400.00. This represents 84 per cent of the membership. We feel that the national program is an excellent one and should receive 100 per cent support. Your help to preserve Americanism is needed now.

The Michigan Health Council has been reactivated. The program, which plans on reaching every community in the state, will deal with health problems. All organizations interested in the health care of our citizens will be asked to become affiliated. The \$7,500.00 expended by the Michigan State Medical Society in its support should be continued and augmented if necessary.

Last January, The Council recommended that the proceedings of the House of Delegates be abstracted in THE JOURNAL MSMS annually. For many reasons we again urge that The Council submit this recommendation to the House of Delegates for approval.

Any member interested in the more detailed reports of Ernst & Ernst or the monthly balance sheets may study the same at his convenience, and your suggestions are solicited.

### The Journal

THE JOURNAL of the Michigan State Medical Society has been published each month under the direction of the Publication Committee of the Michigan State Medical Society. THE JOURNAL has continued to follow the policy, not only of presenting outstanding scientific papers and especially the papers presented at both the Annual Session in September and the Michigan Postgraduate Clinical Institute in March but many manuscripts presented at local societies and others of advanced scientific attainment.

Up to the limit of space, THE JOURNAL has published material to keep the membership informed concerning the socio-economic problems of medicine. We have opposed the program for national socialism which is taking principal form in the effort to socialize medicine. Our editorial policy has been directed chiefly to that issue. Items of special interest to our members have been used with quotations and editorial comments along the line of our greatest interest.

JMSMS has continued the policy of making the covers really distinctive in that they emphasize some of the major activities of the Society. The April number was devoted to Cancer with a special cover stressing the fight against this disease. The May issue honored the member selected as Michigan's Foremost Family Physician, to be especially congratulated for his attainments. The June number was devoted to Michigan Medical Service. The



July number contained, in addition to the roster of the Michigan State Medical Society, a list of the Woman's Auxiliary membership, published for the first time.

Since 1902, when *THE JOURNAL* was established, its first and most important function has been to carry to our members matters of special interest to them, both scientific and economic. The Publication Committee has endeavored to continue that program. The Council believes our members are as well informed as any group in the country; that being true, our efforts have been well rewarded.

### Organization

Organization among the fifty-five component societies continues to be satisfactory. Especially to be commended are the high quality scientific postgraduate "clinic days" being offered by more and more county and district medical societies throughout the year—with programs worthy of presentation by national medical organizations.

The County Secretaries-Public Relations Conference of January 9, 1949, in Detroit was the kick-off for Michigan's CAP program, which has proved to be a most effective weapon against propaganda for political medicine. The CAP is being emulated in many parts of the country. (See "Public Relations," below).

The Third Michigan Postgraduate Clinical Institute was held in Detroit, March 23-26, 1949, and gained a total registration of 1,627, as well as thousands of lines of excellent publicity in Detroit and Michigan newspapers. Attendance at the Institute continues to grow, year after year, a fine tribute to the Program and Arrangements Committees.

MSMS Officers attended numerous Michigan county and district medical society meetings during the year and were honored by being invited to speak before state and county medical societies in Illinois, Indiana, New Jersey, Ohio, Oregon, and West Virginia. Their presentations before lay and civic organizations during the past twelve months—particularly after the inauguration of the CAP Program—totaled hundreds of appearances, with messages beamed to the theme that voluntary medicine has achieved the best results for the people's benefit and is to be preferred to a compulsory federally operated type of political foreign medicine.

### Public Relations Program

The MSMS Public Relations program has assumed national leadership and has maintained its position throughout the year. It has pointed the way to ultimate success by the medical profession and has provided the vehicle to reach that goal.

In addition to the active program of previous years, it has carried on a strong and effective campaign known as *Co-operation with the American People* designed and carried out to the end of promoting voluntary American medicine and opposing socialized medicine. The following are highlights of 1949:

### CAP Plan

This Plan was conceived in November, 1948, and inaugurated in January, 1949. A Booster Session was held on March 24 in Detroit. The essence of the Plan was the establishment of a special "minute man" type of organization with the placing of responsibility on each individual member of the Society under the direction of county CAP committees, District CAP Leaders, the new MSMS Special Committee on Education, and the MSMS Councilors.

Each member of the County CAP Committee was made responsible for ten members of the Society and each member of the Society was made responsible for informing twenty lay citizens. Thus, a strong vertical type of organization was developed that resulted in stimulation of activity by county medical societies, closer liaison between the state and county societies, and the development

of new leaders in organized medicine. This was followed by the development of a horizontal program which brought into action the support of ancillary and lay groups such as the dentists, pharmacists, insurance groups, service clubs, chambers of commerce, political groups and others.

This Plan was presented in Chicago to a large number of state medical society officers and, as a result, was used as an example in many parts of the country. After the Chicago presentation, the Plan was printed and sent to all states; by invitation, a recap was given at the AMA Annual Session in Atlantic City.

The campaign is continuing. A compilation of results to date indicates:

- (A) Over 50,000 Michigan citizens already have written personal letters to their Congressional representatives.
- (B) Over 200 Michigan organizations (including the State Legislature) have passed resolutions opposing socialized medicine, as of June 30. This is the largest total to be boasted by any State in the Union, according to a June survey made by the AMA Public Relations Counsel.
- (C) MSMS members and other speakers have made over 1,193 talks.
- (D) 1,055,187 pamphlets have been distributed in Michigan. A special mailing service was set up in Lansing to aid in this distribution.
- (E) Three advertisements have been placed in forty-nine daily and fifty-six weekly newspapers and in the *Michigan Farmer* with a total reading circulation of 1,750,000.
- (F) Ninety-six special radio programs have been aired in addition to the daily "Tell Me, Doctor" program (see below).
- (G) New motion picture: "To Your Health" has been completed (see below).
- (H) Large and small posters have been distributed throughout the state, in large numbers.
- (I) A Legislative Bulletin was distributed to all CAP workers weekly during the Legislative Session, a total of 12,640 copies.
- (J) Sixteen District Inventory meetings and innumerable county CAP committee meetings were held.
- (K) Aid and assistance in Public Relations organization was given to a majority of the States in the Union, and to Hawaii.
- (L) Five special pamphlets were developed and printed and three are in the process of preparation. One pamphlet, "The Country Doctor Answers the Ewing Report," received and is continuing to gain national attention.
- (M) Personnel of the Public Relations office was expanded to include five P.R. Field Secretaries and one additional office worker in addition to the original staff, making a total of ten. A complete training course was given to all, with schools for the P.R. Field Secretaries held at bi-monthly intervals.
- (N) Copious literature and information were supplied to United States Senators and Congressmen.

### General Public Relations

*Newspaper.*—Advertising (see CAP Plan above). Feature and news releases were issued throughout the year, routinely. Publicity was arranged on major medical meetings of MSMS. Good relations with the press has been consistently maintained.

*Cinema.*—(a) "Lucky Junior," a ten-minute film on immunization and disease control, was presented in 311 theaters throughout Michigan as well as before groups in other states. This is continuing and will be shown in 400 theaters before it is made available to smaller private



groups. (b) The new MSMS film, "To Your Health," is completed and will be run in Michigan's 400 theaters. It will also be shown before smaller private groups. Other State Societies have requested this film, when available.

**Radio.**—(a) "Tell Me, Doctor," the five-minute daily MSMS health news program, is aired over twenty-three Michigan stations for a total of 5,980 separate broadcasts. It is used and reused by medical societies in other states. (b) "Medical Talks," by the University of Michigan and the Michigan State Medical Society, a fifteen-minute weekly program broadcast over nine stations.

**Public Speaking.**—(See CAP Plan). In addition, a Speakers Conference is planned, in Grand Rapids, on September 22.

**Publications.**—The Medical Associates brochure was distributed to schools throughout the state by the Woman's Auxiliary to the Michigan State Medical Society. It has received remarkable acceptance by the schools and the students and has been distributed widely in other states and several foreign countries.

**Awards.**—Eight awards were made (one Distinguished Health Service Award, four Health Service Awards, one Michigan's Foremost Family Physician Award, two recognition awards).

**Organizational.**—(a) Aid was given the Michigan Health Council to develop it into an active organization. (b) Assistance was given to committees on Rural Health, the Michigan Rural Health Conference, Rheumatic Fever Control, Cancer Control, Diabetes, Health Survey Advisory, Commission on Health Care, and Legislative.

**Woman's Auxiliary.**—The Woman's Auxiliary carried out the CAP program and was the outstanding Woman's Auxiliary in the country from the point of public relations activity.

Michigan's leadership of the entire country in both efforts and results in the current campaign and in general public relations activity has been repeatedly recognized. *Such leadership is due directly and completely to the spirit and work and personal sacrifice of the members of the Michigan State Medical Society.*

The organizational detail was reflected in increased work by the MSMS employed personnel. This small group of workers has succeeded in meeting the challenge.

### Contacts with Governmental Agencies

The Michigan State Medical Society not only continues but has greatly augmented its important contacts with many governmental agencies, both federal and state. Chief among these during the past year were:

1. Contacts with U. S. Senators and Congressmen in Washington, D. C. Pursuant to instructions of the 1947 and 1948 Houses of Delegates, The Council dispatched MSMS representatives to confer with Michigan's Congressional delegation in Washington on May 2-3, 1949. These close and personal contacts with Michigan's two eminent Senators and its Congressmen continue to foster much good will on behalf of the Michigan medical profession; The Council feels that these yearly visits should be continued.

2. The Michigan Crippled Children Commission and its Medical Director, Carleton Dean, M.D., continued their fine mutual relationship with the Michigan State Medical Society. The co-operative work of the Commission in the MSMS Rheumatic Fever Control project is both outstanding and praiseworthy.

3. Michigan Department of Health. A fine understanding of mutual problems exists between the Michigan Department of Health and the Michigan State Medical Society, thanks to the catalytic abilities of State Health

Commissioner A. E. Heustis, M.D., who routinely attends the meetings of the MSMS Council and of its Executive Committee. The present satisfactory liaison portends a new era of increasingly important endeavor in health problems—such as the year-round campaign to immunize all Michigan children against diphtheria, small pox, whooping cough, and tetanus. Through action of Dr. Heustis, the MSMS Council and the State Advisory Council of Health resumed their annual joint meetings in July, 1949.

4. State Vocational Rehabilitation. MSMS continues its liaison with the State Vocational Rehabilitation, and in 1949 it appointed a representative who was appointed Chairman of the Medical Section of the Michigan Rehabilitation Association to aid in the development of the MRA program for its 1949 convention.

### Contacts with Non-governmental Agencies

1. Michigan Medical Service continues to serve the medical profession and the public of this State and to maintain its proud position as the largest voluntary medical service health plan in the world. Among all the states, MMS is the leading bulwark against compulsory programs to regiment Medicine. MMS is probably the most outstanding work that the Michigan State Medical Society has done in the last quarter century—that is, making provision so that our patients may systematically and voluntarily budget their medical, surgical and hospital expenses by prepaying a small amount each month and not having to worry about a catastrophic expense in case illness strikes. Michigan Medical Service with its over 1-1/3 million subscribers, \$2,000,000 reserve, and its record of having paid over \$35,000,000 for service, is a great public service corporation of which we are justly proud.

At the end of 1948, over 3,600 participating doctors of medicine were willing to provide medical services under the service plan of Michigan Medical Service. The Officers of Michigan Medical Service recommended that additional physicians who endorse this voluntary non-profit plan be invited to sign agreements indicating their willingness to make available their professional services under the Plan; such an invitation to doctors to lend encouragement to a voluntary health program was included in the Secretary's Letter to all members (February 22, 1949).

2. The Michigan Society for Crippled Children and Adults, Inc., continued in the past year to underwrite Michigan's pioneering Rheumatic Fever Control Program with a generous grant to the Michigan State Medical Society. Thirty Rheumatic Fever Control Centers (16 in Wayne County) are now in operation, some in their fourth year. The long-standing co-operation of Emmet Richards, Alpena, and P. C. Angove, Detroit, President and Executive Directors, respectively, of the Michigan Society for Crippled Children and Adults, is again gratefully recorded.

3. Michigan Heart Association. The first proposal for a "Michigan Heart Association" was discussed at The Council meeting of September 19, 1948, and mainly under the impetus of MSMS, Michigan Heart Association was incorporated as a non-profit organization in Michigan on February 17, 1949, with C. E. Wilson, Detroit, as Chairman of the Board; W. B. Cooksey, M.D., Detroit, President; and L. Fernald Foster, M.D., Bay City, Secretary. The Michigan Heart Association was recognized as an affiliate of the American Heart Association in May, 1949, and the new organization has as one of its important projects for the ensuing year, a joint sponsorship with MSMS and the Michigan Society for Crippled Children and Adults, Inc., of Michigan's Rheumatic Fever Control Program.

4. The Third Michigan Rural Health Conference, scheduled for October 28-29, 1949, represents the joint sponsorship of the Michigan State Medical Society and forty-nine groups, all interested in rural health; chief



among these are the Michigan Foundation for Medical and Health Education, Inc. (financial sponsor), the Michigan Health Council (personnel), and the Michigan State Medical Society (public relations).

5. The Michigan Health Council accelerated its activities during 1948-49 and now boasts a membership of sixteen co-operating agencies. The stimulation of community health councils and the co-operative work in connection with the Third Michigan Rural Health Conference bode well for the telling success of the revived Michigan Health Council which now has new headquarters and an Executive Secretary in Lansing.

6. National Foundation for Infantile Paralysis. In October, 1948, the MSMS Executive Committee of The Council, at the request of the National Foundation for Infantile Paralysis, appointed a Medical Advisory Committee to the Foundation, which has met on three occasions and is working toward the development of projects of mutual interest to MSMS and the Foundation.

7. Michigan Medical Assistants' Society was organized in October, 1948, and requested MSMS to appoint a Liaison Committee which aided the new Society in the development of its Constitution and By-Laws, in the formation of the association's structure, and in the development of its convention program.

8. National Associations contacted in various ways during the past year were: (a) American Cancer Society; (b) American Red Cross, particularly in connection with the Blood Bank Program; (c) National Conference on Medical Service of which President E. F. Sladek, M.D., Traverse City, was Chairman at its 22nd Conference in Chicago in February 1949; (d) Conference of President and other Officers of State Medical Associations of which A. S. Brunk, M.D., Detroit, was re-elected as Director; (e) Associated States Postgraduate Committee, of which E. F. Sladek, M.D., acted as Chairman and H. H. Cummings, M.D., Ann Arbor, as Secretary during the past year.

9. American Medical Association. The Council again reiterates its appreciation to the parent organization for the many and miscellaneous services performed on behalf of MSMS and its individual members during the past year. It commends the AMA on its new leadership and invites full co-operation of the membership with the AMA and its National Education Program. The Officers and component county medical societies of the Michigan State Medical Society have co-operated actively with the American Medical Association in its "Grass Roots" Conference, its National Rural Health Conference, the Medical Society Executives Conference and the various Councils and Bureaus of the parent organization.

### Committees

A total of fifty-four Committees functioned during the past year to aid the membership in the study of important matters and of current problems facing the medical profession. The unusually high accomplishments of the past twelve months attained by the Michigan State Medical Society is best portrayed in the enlightening Annual Reports of these active groups. Sincere gratitude is due the Chairmen and Members of the MSMS Committees for their time and effort contributed willingly in behalf of all the medical practitioners of this State.

Some of the more active Committees during the past twelve months included:

1. The Committee on Scientific Work arranged the excellent program for the 1949 Annual Session in Grand Rapids. This three-day postgraduate course, to be enjoyed by several thousands of doctors of medicine, is best evidence of the many months of preparation spent by this planning committee.

2. The Public Relations Committee and the more recently created Special Committee on Education (the latter being a Committee of The Council) continued to be the two groups spearheading the medical profession's fight against the welfare state. The accelerated activities

of these two Committees, especially during the first eight months of 1949 when the federal Congress was in session, were developed always in close co-operation with The Council and its Executive Committee which at all times carefully scrutinized the contractual obligations and expenditures of the public relations department. A more detailed report of the work of the Public Relations Committee and the Special Committee on Education is included elsewhere in this report.

3. The Cancer Control Committee continued its unified program, with all cancer groups in Michigan working as one, during the past year. Upon the recommendation of this Committee, The Council approved the Hillsdale-type plan of cancer detection, and that "the question of making the county health unit the repository of statistical data be a matter of decision with the local county medical society."

The Council authorized a "Cancer Control Day" to be held in Grand Rapids on Saturday, September 24, the day following the MSMS Annual Session; and also approved a meeting of state and local organizations interested in cancer detection, to be arranged by the Cancer Control Committee, scheduled for October 11 in Lansing.

4. The Rheumatic Fever Control Committee's work was so increased during the past year that it found it necessary to employ a full-time Medical Co-ordinator (Leon DeVel, M.D., Grand Rapids) who began his work of integration on January 1, 1949. This Committee also sponsored the well-attended Heart and Rheumatic Fever Day of Saturday, March 26, following the third Michigan Postgraduate Clinical Institute.

5. The Legislative Committee worked exceedingly hard during the 1949 Legislative year. Mere words cannot express the tremendous amount of thought and time-consuming effort necessary to advance the cause of Medicine to the 133 members of the Legislature. The Council invites attention to the detailed report of the Legislative Committee to be found on Page 898. True thanks are due the Committee's Chairman L. A. Drolett, M.D., Lansing, who, during the first five months of this year, was ready and available at all hours of the day and night to attend sessions of the Legislature and of its numerous committees.

6. The Committee on Uniform Fee Schedule for Governmental Agencies performed a monumental task in revising the Schedule, as of May 1, 1949. This revision, under the leadership of Chairman R. L. Novy, M.D., Detroit, was accomplished by a re-survey of the Schedule through contacts with every MSMS member, county medical societies, hospital staffs, and specialty societies. The Council has authorized the Committee to proceed with the printing of the Uniform Fee Schedule for Governmental Agencies, as revised.

7. The Committee on Emergency Medical Service aided the Governor in a survey of medical services available in Michigan in case of emergency due to atomic warfare. Much foresight and leadership was demonstrated by this Committee, under the Chairmanship of Harry F. Becker, M.D., Battle Creek.

8. The Committee on Postgraduate Medical Education continues its teaching work, outstanding among all the states of the Union. Under the Chairmanship of H. H. Cummings, M.D., Ann Arbor, the Committee has developed new Centers, to fit in with the modern schedule of autonomous postgraduate activity sponsored by the larger county and district medical societies of Michigan; with the years, the work of the Committee is becoming more "grass roots" in character and is finding greater appreciation than ever among the profession of the State.

9. Two new and important committees were appointed during the past year: the Geriatrics Committee (created by the 1948 House of Delegates) which subsequently appointed two subcommittees on (a) Diabetes Control; and (b) To Study Problems of Caring for the Aged (at



the county level). The second new committee, called the Mediation Committee, was formed in September, 1948, to mediate any charges of impractices against the profession or an individual member and to act as a court of appeals to county medical society mediation committees. "Impractices" were defined as those actions of doctors which fall short of being breaches of ethics but which constitute poor public relations.

*The Annual Reports of those Committees of The Council, not indicated above, which held one or more meetings during the past year, are printed as addenda to the Annual Report of The Council.*

### More Space Needed for Executive Offices

For over three years, The Council has recognized the need for more adequate space to house the Executive Office and staff, if the morale and efficiency of our workers in the home office is to continue on a high plane. This subject has occupied attention at every meeting of The Council and of its Executive Committee. A special Committee investigated six different sites in the city of Lansing. The possibilities of erecting a building or purchasing suitable space were exhaustively investigated—every lead was followed. In May, 1949, negotiations to buy a small building, admirably adapted for the needs and purposes of MSMS and well located near Michigan's Capitol, for \$55,000, were entered into—but are stalled due to an unfavorable zoning classification. The MSMS General Counsel is now seeking a specific exemption for the MSMS or a change in the zoning ordinance. It is hoped that a favorable report re the purchase of this or similar property can be given to the House of Delegates in the Supplemental Report of The Council (on September 19, 1949).

### Matters Referred to The Council by 1948 House of Delegates

1. Resolution re consultation of doctors of medicine with osteopaths. The Council referred this resolution to a special committee which developed a report which will be presented to the House of Delegates on September 19, 1949.

2. Creation of National Agency for Voluntary Health Service Plans. This matter was discussed at the October 20, November 10 (with Michigan's Delegates to the AMA) and at the November 21 meetings of the Executive Committee of The Council, and the matter was presented to the AMA House of Delegates, November, 1948, in St. Louis; the AMA House of Delegates refused to approve the creation of a National Agency for Voluntary Health Service Plans but recommended the development of a national enrollment campaign. In Atlantic City in June, 1949, the AMA House of Delegates finally approved the creation of a National Agency for Voluntary Health Service Plans, as an independent organization; while the Agency will have medical membership on its Board, it will not be an affiliate of the American Medical Association.

3. Removing the block in both Basic Science and the State Board of Registration in Medicine. This important subject was referred to a special committee representative of the Michigan State Medical Society, the Michigan State Board of Examiners in the Basic Sciences and the Michigan State Board of Registration in Medicine, which Committee (known as the Committee of Six) met frequently in 1948-49 and developed a proposed amendment to the 1899 Medical Practice Act to authorize postgraduate hospital training beyond one year (i.e., as senior intern, assistant resident and resident) prior to licensure, with authority to the State Board of Registration in Medicine to make appropriate rules in relation thereto. Such a proposal was offered to the Legislature. At first this Bill (S.B. 292)—which would have struck at the shortage of doctors of medicine in Michigan—was accepted by leaders of the State Senate,

but under-cover opposition kept it in the State Affairs Committee where it died.

A recommendation on this subject follows.

4. Increase number of medical graduates in the State. The Executive Committee of The Council appointed a special committee to confer with the Deans of Michigan's medical schools, with the Governor, and with the Michigan Legislature's appropriating committees, to investigate the possibility of increasing the number of medical graduates in Michigan. (The matter was also discussed in detail with the President and the Dean of the Medical School of the University of Michigan by the Liaison Committee with U. of M. President, on December 10, 1948). At the Special Committee meeting of January 27, 1949, the two Medical Deans reported a capital investment totaling \$12,000,000 plus annual operating costs of \$900,000—plus a one-third increase in the faculties—would be needed to increase the number of students entering Michigan's medical schools from the present 208 to 315. As a direct result, a concurrent resolution (SCR #23), backed by the MSMS, was introduced into the Michigan Legislature asking that consideration be given to an increase in appropriations to the University of Michigan Medical School and Wayne University College of Medicine so that the number of medical students could be increased. Subsequently, S.B. 331 was introduced asking for an appropriation of two and one-half million dollars for construction of an out-patient clinic at the U. of M. Although this particular bill was not passed, the Legislature at its sine die session approved the construction of an OPD clinic in Ann Arbor by appropriating funds for plans and specifications. The problem is far from solved, but the Michigan State Medical Society succeeded in publicizing the need for relief, thus definitely proving that the medical profession is sincerely desirous for a marked increase in medical graduates, critics to the contrary notwithstanding.

5. Veterans Administration Hospital at Ann Arbor. This matter was referred to Michigan's Delegates to the AMA for presentation at the St. Louis Session. Contacts were made with officers of the American Hospital Association and others, and a special committee of The Council was created to meet with an officer of the Veterans of Foreign Wars to discuss this subject; this veteran agreed that the general hospital building program of V.A. was not vital but that additional tuberculosis and neuropsychiatric beds were indicated. The Council felt that it is not necessary to build new federal general hospitals as the same beneficial results could be obtained by enlarging existing facilities (including private hospitals) and the reallocation of federal beds currently available in this area. Subsequently, President Truman ordered a cut-back in certain hospitals, including four in Michigan (but not including the proposed V.A. hospital in Ann Arbor). Even the President's cut-back, to save the expenditure of useless billions of dollars, met with vigorous objection from Congressmen interested in porkbarrel generosity to their districts. Meanwhile the attitude of V.A. has been one of high secrecy with little authentic information available on definite plans for building the proposed hospital in Ann Arbor.

6. Medical Library service. This resolution was referred to H. H. Cummings, M.D., of the Department of Postgraduate Medicine, University of Michigan, who after investigation reported to The Council in January, 1949:

"After consultation with Warner G. Rice, Director of the General Library of the University of Michigan, and with Sue Biethan, Chief Medical Librarian, I find that the University has a service adequate for the needs of the doctors of the State. Last year over 400 Michigan physicians used this service, and over 1,000 volumes were loaned to these physicians.

"Knowing these things it seems entirely unnecessary for the State Medical Society to try to develop another medical library. It would take hundreds of thousands of



dollars and years of work to duplicate what we already have in the University Medical Library. It may be that our doctors have not been acquainted with the fact that this medical library is theirs and may be used by them."

7. Lists of nonmembers certified to House of Delegates. Pursuant to the House of Delegates' instructions of 1948, The Council submits a list of former members whose 1949 dues are not paid as of September 1, 1949. This list was submitted to and certified by county and district medical societies, to insure accuracy.

### Recommendations

The Council recommends:

1. That each and every member of the Michigan State Medical Society co-operate wholeheartedly and to the best of his ability, both by action and financially, to the National Education Campaign of the American Medical Association and that each member feel it an honor and a privilege to aid the AMA not only by payment of the small AMA assessment but by vigorously entering the AMA Program of active and direct resistance against attempts to throw the practice of medicine into politics.

2. That the MSMS Legislative Committee be instructed to reintroduce into the 1951 Legislature a proposal similar to S.B. 292 of 1949, to permit the exemption of interns and residents from the provisions of licensing under the Michigan Medical Practice Act for a period of not over six years in order to authorize postgraduate hospital training beyond one year and to encourage more doctors of medicine to train and locate in this State; and that the Legislative Committee utilize all its efforts, well in advance of the 1951 Legislative Session, to insure that this proposal is well understood and is favorably received by the Michigan lawmakers and all other parties in interest.

3. That the House of Delegates specifically authorize. The Council to purchase a building, in Lansing, with suitable space and dignity, to house the Executive Offices of the MSMS, so that the critical situation of overcrowding in the present inadequate space is remedied.

4. That the Committee on Constitution and By-Laws of the House of Delegates be requested to give consideration to several necessary amendments to the 1948 revised Constitution and By-Laws.

5. That Wilfrid Haughey, M.D., of Battle Creek, longtime Councilor and former State Society Secretary, who is presently Editor of the Michigan State Medical Society JOURNAL and official representative of the State Society to numerous ancillary health groups, be considered by the House of Delegates as recipient of an award, to be designated as "President for a Day"; this honor to be conferred on the occasion of Officers Night, September 21, 1949, during the Michigan State Medical Society Annual Session in Grand Rapids.

6. That the special assessment of \$25 be continued for the year 1950, in order to meet the need of additional funds for various purposes in the work of the Michigan State Medical Society.

Respectfully submitted,

O. O. BECK, M.D., *Chairman*  
R. J. HUBBELL, M.D., *Vice Chairman*  
C. E. UMPHREY, M.D.  
P. A. RILEY, M.D.  
WILFRID HAUGHEY, M.D.  
J. D. MILLER, M.D.  
R. C. POCHERT, M.D.  
T. E. DEGURSE, M.D.  
L. C. HARVIE, M.D.  
E. A. OAKES, M.D.  
F. H. DRUMMOND, M.D.  
C. A. PAUKSTIS, M.D.  
A. H. MILLER, M.D.  
W. S. JONES, M.D.  
D. W. MYERS, M.D.  
E. A. OSIUS, M.D.  
WILLIAM BROMME, M.D.

W. B. HARM, M.D.

J. S. DETAR, M.D.

E. F. SLADEK, M.D., *President*

W. E. BARSTOW, M.D., *President-Elect*

L. FERNALD FOSTER, M.D., *Secretary*

A. S. BRUNK, M.D., *Treasurer*

P. L. LEDWIDGE, M.D., *Immediate Past President*

### ANNUAL REPORT OF COMMITTEE ON POST-GRADUATE MEDICAL EDUCATION—1948-49

The Committee on Postgraduate Medical Education held two meetings during 1948-49. A majority of the committee members attended both meetings.

The extramural teaching program in the fall of 1948 was carried on in the following centers: Ann Arbor, Battle Creek, Bay City, Flint, Grand Rapids, Jackson, Lansing, Mt. Clemens, Saginaw, Traverse City, as well as five centers in the Upper Peninsula of Sault Ste. Marie, Marquette, Calumet, Ironwood, and Iron Mountain. This is the first time the program has been given in the fall in the Upper Peninsula, and the interest and attendance were highly gratifying. The subjects presented on the fall program in all centers were:

"Newer use of antibiotics from the medical and surgical standpoint."

"Medical and obstetrical conference."

"Cardiovascular renal disease and diabetes complicating pregnancy."

At the meeting of the Committee on January 12, 1949, the type of teaching program being offered to physicians of the state and the re-allocation of teaching centers were thoroughly reviewed. A communication from Kent County stated that the physicians in Grand Rapids are interested in a one-day clinic each year and a program similar to that of the annual Michigan Postgraduate Clinical Institute. Ingham County physicians requested either a program of short papers by younger men with research in progress, or a program by older, well-known men. The Jackson center asked that the present type of program be continued and suggested as topics "Birth Anomalies" and "Genetics." These subjects were presented in Jackson, Lansing, and Mt. Clemens in the spring, 1949, program. A request that Cadillac be included as a teaching center was received.

The Committee agreed that the time was now here for a change in the type of program in certain centers and for a re-allocation of teaching centers. Dr. Cummings was authorized to implement these changes in the spring, 1949, program. Accordingly, the following centers were selected for the spring, 1949, program: Adrian (instead of Ann Arbor); Alpena, Benton Harbor (instead of Kalamazoo); Midland (instead of Saginaw); Cadillac (instead of Traverse City for the spring meeting). Bay City, Flint, Jackson, Lansing, Mt. Clemens, and the centers of Sault Ste. Marie, Marquette, Calumet, Ironwood and Iron Mountain-Powers in the Upper Peninsula will continue as extramural teaching centers. The spring meetings will be held in Cadillac and the fall meetings in Traverse City. This arrangement was made since the Collier-Penberthy postgraduate clinic at Traverse City serves that center in the summer. In the fall of 1949 the program may be given in Muskegon instead of Grand Rapids.

The type of program has been changed to include more teachers on the program in many of the centers. Physicians in different fields presented twenty minute talks during the evening programs. Wherever possible, a clinic and consultation service was given beginning at 4:00 p.m. in the afternoon. In order to present this type of program, a greater number of teachers appear at one meeting. The expense of this type of program makes it necessary to reduce the number of meetings to one in the fall and one in the spring in each center. In addi-



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tion to these programs, the three-day Michigan Postgraduate Clinical Institute held in Detroit in March is available to all physicians in the State.

While a smaller number of physicians are served in the present centers, the above changes make it possible to reach areas where the programs have been urgently requested. Many of the larger centers in which there is maximum specialization are quite self-sufficient in medical teaching. The new centers are immediately served by 35 or more physicians, the majority of whom are engaged in general practice, and have facilities for meeting places and clinics.

The types of programs presented are as follows: At Adrian, Alpena, Cadillac, and Midland, and the five centers in the Upper Peninsula, a clinic with patients selected by the staff of each center was held from 4:00 to 5:45 p.m., followed by dinner at 6:00 p.m. At 7:30 until 9:00 p.m. twenty-minute papers by each teacher on the program were presented. The number of speakers on each program varied from three to five. At Bay City, Flint, Jackson, Lansing, and Mt. Clemens, the programs began at 7:00 p.m. and consisted of lecture presentations by each teacher on the program. The attendance was as follows:

	Fall	Spring	Individuals Physicians
Adrian .....	—	31	31
Alpena .....	—	22	22
Ann Arbor .....	85	—	85
Battle Creek .....	65	—	65
Bay City .....	52	40	62
Benton Harbor .....	—	46	46
Cadillac .....	—	43	43
Flint .....	98	59	114
Grand Rapids .....	40	—	40
Jackson .....	94	63	103
Lansing .....	95	69	118
Midland .....	—	44	44
Mt. Clemens .....	45	45	58
Saginaw .....	62	—	62
Traverse City .....	48	—	48
Upper Peninsula:			
Sault Ste. Marie .....	21	19	26
Marquette .....	33	29	38
Calumet .....	15	18	21
Ironwood .....	15	15	17
Powers (Iron Mountain) .....	17	9	25
Total number of Physicians attending .....	785	552	1,068

Following are the names of physicians who participated in the extramural postgraduate teaching program:

Paul S. Barker, M.D.	Alfred M. Large, M.D.
Alexander Barry, M.D.	Edward E. Levine, M.D.
Gaylord S. Bates, M.D.	James V. Neel, M.D.
Frank H. Bethell, M.D.	Bradley M. Patten, M.D.
Robert W. Buxton, M.D.	Grover C. Penberthy, M.D.
Wyman C. C. Cole, M.D.	H. Marvin Pollard, M.D.
Arthur C. Curtis, M.D.	Henry K. Ransom, M.D.
Russell N. DeJong, M.D.	William D. Robinson, M.D.
Harold F. Falls, M.D.	Maurice H. Seevers, M.D.
F. Bruce Fralick, M.D.	Edward D. Spalding, M.D.
Reynold L. Haas, M.D.	Charles S. Stevenson, M.D.
Mark A. Hayes, M.D.	Harry A. Towsley, M.D.
Samuel D. Jacobson, M.D.	Ernest H. Watson, M.D.
Joseph L. Kubanek, M.D.	Frank A. Weiser, M.D.
Harold J. Kullman, M.D.	James L. Wilson, M.D.

The Third Annual Michigan Postgraduate Clinical Institute was held in Detroit on March 23, 24, 25, 1949. An excellent program was presented. The number of physicians attending the three days was 1,300. On March 26, a program on "Heart and Rheumatic Fever" was presented, which was attended by 289 physicians. The program for the 1950 Institute is scheduled for March 8, 9, and 10.

During the year 1948, sixty Certificates of Fellowship and sixty Certificates of Associate Fellowship in Postgraduate Medical Education were issued by the Society to its members.

At the meeting of the Committee on May 26, 1949, it was suggested that two new centers be established in the Upper Peninsula, namely, Menominee and Escanaba, and that the program, consisting of a scientific presenta-

tion and a clinical discussion session, be presented by an internist, surgeon, pediatrician, and obstetrician. The councilors and Committee members in the Upper Peninsula are to be responsible for dates and details of meeting arrangements.

It was recommended that the Council be requested to make a directive to each councilor of the state that he appoint a chairman in the county societies of his district for the postgraduate center, and that these chairmen be made responsible for the conduct of the meetings. These names are to be submitted to the Chairman of the Postgraduate Committee and the Executive Office, and each chairman provided with an information sheet setting forth his duties in regard to arrangements for reception of speakers, place of meeting and time, hotel accommodations for speakers, publicity to all physicians in the area and to newspapers, dinner expenses of speakers, et cetera.

The Committee moved that information about postgraduate attendance credit be sent to Dr. H. H. Cummings to THE JOURNAL, county bulletins, and to each county secretary.

The content of the fall, 1949, program is to be selected by Dr. Cummings. As far as possible, Dr. Cummings will be guided by the wishes of each center in regard to programs presented.

The Michigan Department of Health has suggested the subject of "Prematurity." This topic will be included in the fall program.

The Committee voted to recommend to the Council that the Michigan Foundation for Medical and Health Education be recognized in the postgraduate program, and be authorized to award Associate Fellowship and Fellowship Certificates in postgraduate medical education for attendance on the courses. This function has been carried out in the past by the Committee on Postgraduate Medical Education for the Society.

### Intramural Activities

The Decentralized Graduate Medical Education Program which was begun in 1946 at the University in affiliation with various hospitals in the state was transferred in July, 1948, to the Department of Postgraduate Medicine. The program is outlined as follows:

1. An eight months' course of training in the basic sciences at the University of Michigan Medical School. Applicants for the course are to be recommended by the hospitals where they are serving their residencies. The hospitals affiliated with the University of Michigan in the Program are: Alexander Blain Hospital and Clinic, Detroit; Blodgett Memorial Hospital, Grand Rapids; Bronson Methodist Hospital, Kalamazoo; Butterworth Hospital, Grand Rapids; Evangelical Deaconess Hospital, Detroit; Harper Hospital, Detroit; Hurley Hospital, Flint; Leila Y. Post Montgomery Hospital, Battle Creek; Mount Carmel Mercy Hospital, Detroit; Pontiac General Hospital, Pontiac; Saginaw General Hospital, Saginaw; St. Joseph's Mercy Hospital, Ann Arbor; St. Joseph's Mercy Hospital, Detroit; St. Mary's Hospital, Grand Rapids; Edward W. Sparrow Hospital, Lansing. The course supplements the training received in the above named hospitals and enables the residents to fulfill the requirements for specialization. During 1948-49, thirty physicians enrolled in this course.

2. A visiting program in the specialties of internal medicine, surgery, and obstetrics and gynecology to the affiliated hospitals. Once a month a surgeon, internist, and obstetrician and gynecologist from the University Hospital visit these hospitals, according to the specialties for which they are approved, to conduct a teaching program with the resident and visiting staffs.

3. A two-year internship and residency in the Beyer Hospital, Ypsilanti, and the James Decker Munson Hospital, Traverse City, for physicians interested in becoming general practitioners. This program requires these physicians to spend six months in one of the above named



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hospitals and six months at the University Hospital each year on a rotation schedule for a two-year period. Four interns and residents in each hospital have been in training during the year.

The residents who have attended the basic sciences course and the physicians preparing for general practice are most enthusiastic about the program. The affiliated hospitals are greatly pleased with the visiting program and are asking for an increase in this type of service.

The postgraduate courses listed below were given at the University of Michigan Medical School in 1948-49, with the following attendance:

Surgical Pathology (slides) .....	18
Electrocardiographic Diagnosis .....	147
Decentralized Resident Training Program .....	30
Clinical Internal Medicine .....	49
Clinical Exercises for Practitioners .....	42
Internal Medicine (American College of Physicians) .....	40
Pediatrics .....	28
Application of the Basic Sciences .....	6
Urology Conference .....	49
Cancer Course .....	26
Anatomy .....	43
Ophthalmology Conference .....	83
Diseases of the Gastro-Intestinal Tract .....	18
Metabolism and Endocrinology .....	28
Rheumatic Disease .....	20
Recent Advances in Therapeutics .....	22
Disease of the Heart .....	40
Disease of the Blood .....	19
Pediatrics .....	20
Allergy .....	14
Diagnostic Roentgenology .....	63
Personal Courses (Assistant Residents, Residents and Miscellaneous Registrations) .....	224
	1,029

A total of ninety Certificates of Proficiency were granted by the Department of Postgraduate Medicine to physicians who have been recommended by the heads of their departments as well qualified to practice their chosen specialty.

A record of the postgraduate intramural medical education program for 1948-49 at Wayne University College of Medicine is included in this report. The large number of postgraduate courses and medical education activities carried on in Detroit and the Wayne County area makes it unnecessary to provide additional extramural teaching facilities there. The extensive and excellent courses given by Wayne University are serving physicians in that area who are preparing for special examinations as well as those who desire refresher work.

## POSTGRADUATE COURSES—1948-49 Wayne University College of Medicine

Courses	1st Qtr.	2nd Qtr.	3rd Qtr.
Beginning Hematology .....	11		
Surgical Pathology .....	35		
Path. of Parasitic Diseases .....	1		
P. Chemistry Seminar .....	6	4	5
Survey of Physiology .....	16		
Dermatology Seminar .....	5	5	
Conf. on Venereal Diseases .....	2		
Diagnostic Conference .....	15	6	5
Gastroenterology .....	6	6	
Medical X-Ray Conference .....	12	3	1
Medical Pathologic Conference .....	1		
Allergy Clinic and Conference .....	6	2	
Surgery Seminar .....	9	1	2
Basic Ophthalmology .....	8	8	8
Radiology Seminar Conference .....	1		
Surgical Anatomy .....		15	15
Advanced Histology .....		2	
Neuropathology .....		13	
Pathology of Neoplasms .....		20	
Dermatopathology .....		3	
Survey of Pharmacology .....		5	
Endocrinology .....		5	
Beginning Physics in Radiology .....		3	
Regional Anatomy:			
Extremities and Back .....			9
Trunk .....			16
Head and Neck .....			5
Blood .....			2

Survey of Medical Chemistry .....	3	
Nutrition and Metabolism .....	1	
Pathology of Bone and Joint Diseases .....	8	
Gynecologic Pathology .....	29	
<i>Quarters</i>	<i>Number Registered</i>	<i>Veterans</i>
September-December, 1948 .....	110	45
December, 1948-March, 1949 .....	83	49
March-June, 1949 .....	94	63

The Committee on Postgraduate Medical Education of the Michigan State Medical Society wishes to acknowledge the continued co-operation of all supporting agencies. Without the fullest confidence of the members of the Society, the program would be futile and, but for the willingness of the faculties of Wayne University College of Medicine and the University of Michigan Medical School to serve, the teaching would not be of its present high calibre. The interest and financial support of the Michigan Department of Health have made available a broad teaching program in obstetrics and pediatrics. The Committee thanks all these agencies and expresses the hope that the results of these efforts will justify the continuation of their support.

This is an age of change and the Committee feels that changes in the location of teaching centers and type of programs have been necessary to serve many physicians who have not been able to avail themselves of the programs in the formerly established centers. Statistical studies of the reports of attendance show that a keen interest is being maintained by most of the physicians of the state. At present complete records of all the postgraduate medical education activities of specialists and general practitioners in the state are not available. However, it seems evident that Michigan physicians are keenly aware of the necessity for continuing medical education in order that the people of Michigan be well served.

Respectfully submitted,

H. H. CUMMINGS, M.D., *Chairman*  
E. I. CARR, M.D.  
A. B. ALDRICH, M.D.  
B. R. CORBUS, M.D.  
G. J. CURRY, M.D.  
A. C. FURSTENBERG, M.D.  
L. J. GARIEPY, M.D.  
JOHN HEIDENREICH, M.D.  
P. A. RILEY, M.D.  
J. M. ROBB, M.D.  
J. M. SHELDON, M.D.  
W. JOE SMITH, M.D.  
E. D. SPALDING, M.D.  
F. A. WEISER, M.D.  
G. H. SCOTT, Ph.D.

## ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE 1948-49

As co-ordinator for its numerous advisory groups, the Committee on Preventive Medicine presents the following summary of constructive action taken during the past year:

1. In co-operation with Dr. A. E. Heustis, State Health Commissioner, a plan of proposed immunization policies and arrangements for the month of May as immunization month were formulated.

2. The Maternal Health Committee has completed a study of laws pertaining to sterilization and therapeutic abortions and recommended a rewording of the present law regarding therapeutic abortions.

3. The Venereal Disease and Cancer Control Committees continued their educational campaigns aimed at the public through the medical profession.

4. The Child Welfare Committee is engaged in a study of prematurity, and, together with the Committee on Infectious Diarrhea, is attacking this latter problem with vigor.

## COMMITTEE ANNUAL REPORTS

5. The Rheumatic Fever Control Committee is in full swinging action through its numerous centers, the development of the Michigan Heart Association, the distribution of digests of current literature and a brochure on diagnostic standards and statistical data. Its program on Rheumatic Fever Day last March 26 was an outstanding educational contribution in this field.

6. The Scientific Radio Committee has by now completed its schedule of thirty-nine scientific broadcasts through which the public has been apprised of the signal advances in scientific medicine.

7. The Geriatrics Committee is making an important contribution in co-operating with the Michigan Diabetes Association in the annual Diabetes Detection Drive.

Detailed reports of the activities of each of the advisory committees attest to the industry and telling effort put forth in the interest of the public health.

The helpful co-operation of the Health Commissioner, Dr. Albert E. Heustis, and the State Health Department is gratefully acknowledged.

Respectfully submitted,

WILLIAM S. REVENO, M.D., *Chairman*  
W. B. COOKSEY, M.D.  
G. D. CUMMINGS, M.D.  
H. H. CUMMINGS, M.D.  
J. M. DORSEY, M.D.  
H. H. GAY, M.D.  
CAMERON HAIGHT, M.D.  
A. E. HEUSTIS, M.D.  
R. M. KEMPTON, M.D.  
R. B. KENNEDY, M.D.  
R. D. McCLURE, M.D.  
N. F. MILLER, M.D.  
L. W. SHAFFER, M.D.  
J. M. SHELDON, M.D.  
FRANK VAN SCHOICK, M.D.

### ANNUAL REPORT OF THE COMMITTEE OF RHEUMATIC FEVER CONTROL

This Committee has had several meetings throughout the year and two more are planned. In addition to the many problems of policy relative to the operation of the thirty one centers, the committee activities can be enumerated as follows:

1. Activation of two additional centers, one in Alpena, one in Muskegon.

2. Forming a nucleus of a Study Committee which was successful in setting up the Michigan Heart Association under the same general plan as now prevails in the Michigan Foundation. The Heart Association participated in a fund drive this past spring which is reported to have netted an excess of \$100,000. The Rheumatic Fever Control Committee will participate in the disbursement of this money. It is contemplated that the Rheumatic Fever Control Committee will become a Rheumatic Fever Council of the Michigan Heart Association.

3. Dr. Leon DeVel is now full time co-ordinator for the Rheumatic Fever Control Committee as of January 1, 1949. This, we believe, is the first instance in medical history where a state medical society has gone so far into the field of public health as to employ a full-time physician to co-ordinate its activities in any one particular field.

4. Continued the program of professional and lay education by (a) a postgraduate conference on rheumatic fever and heart disease following the annual spring postgraduate conference, (b) repeated press releases relative to the general problem of rheumatic fever, (c) continued abstracts of the literature which are forwarded to all committee members and (d) preparation of materials to be published in local county medical society bulletins, (e) recommended to the Council that a panel

on rheumatic fever be set up in the postgraduate programs which are carried to the local societies.

5. Studied a possibility of a research scholarship in rheumatic fever for medical schools and discussed at length possible research projects related to our Committees activities.

6. The Committee has continued to enjoy the fine support of the Michigan Society for Crippled Children and Disabled Adults and wishes to express its gratitude to the Society not only for financial aid but also for the splendid assistance and counsel of its executive director.

7. The Committee wishes to acknowledge the generous attitude of the Michigan Crippled Children's Commission towards hospitalization and care of rheumatic fever patients in the state and the willing co-operation of the Alpha Phi fraternity in the execution of the state-wide program.

Respectfully submitted,

FRANK VAN SCHOICK, M.D., *Chairman*  
PERCY C. ANGOVE  
DEVERE BOYD, M.D.  
NORMAN E. CLARKE, M.D.  
L. FERNALD FOSTER, M.D.  
THOMAS FRANCIS, JR., M.D.  
C. G. JENNINGS, M.D.  
MARK OSTERLIN, M.D.  
A. HAZEN PRICE, M.D.  
H. H. RIECKER, M.D.  
ANDREW M. ROCHE, M.D.  
CARLETON DEAN, M.D.

### ANNUAL REPORT OF THE CANCER CONTROL COMMITTEE—1948-49

The Cancer Control Committee as a whole held three meetings during the year: one in November, 1948, in Lansing, one in February, 1949, in Detroit, and one in June, 1949, in Ann Arbor. Additional meetings were held by the sub-Committees on Lay Education and Professional Education.

Much time was given to consideration of periodic medical examinations for the detection of early cancer. The Committee had surveyed the 15 cancer detection centers in Michigan obtaining comparable information as to their organization, operation, capacity and costs of equipment and operation. The survey showed these organizations to be costly to equip and operate, limited in the number of examinations made and to require a considerable amount of the participating physician's time to make the examination. A report of this survey appeared in the April, 1949, issue of *THE JOURNAL*, Michigan State Medical Society.

The Committee reached the conclusion that these examinations could be made more easily and adequately, at less cost and in much greater numbers in the same length of time by the physician in his own office during his regular office hours. This would also mean greater financial saving to the community and retention of the patient-physician relationship unimpaired.

To meet the demand for medical examinations the Committee approves and recommends the Hillsdale Plan for Tumor Detection as the one best suited to the majority of Michigan communities. This Plan has been adopted—often in modified form to meet local conditions—in twelve counties: Berrien, Clinton, Eaton, Genesee, Hillsdale, Kalamazoo, Lenawee, Livingston, Mason, Oakland, Ogemaw, and Washtenaw, and is under discussion in several others. The Committee plans to convene a meeting of all statewide organizations interested in health to discuss the Hillsdale Plan and secure its adoption by as many counties as possible. A report of the organization of the Hillsdale Plan and an analysis of its first year's operation appeared in the April, 1949, issue of *THE JOURNAL*, Michigan State Medical Society.

Volume II, *The Michigan Cancer Bulletin*, has been



published and its distribution to all members of the Michigan State Medical Society will be concluded by the end of the year. This Bulletin is meeting with general approval and requests are being received from outside the state for copies.

The Michigan Cancer Program brochure, 30,000 copies of which have been distributed to physicians, dentists, pharmacists, hospitals, health departments and other organizations, is undergoing revision for republishing at a later date.

For the past two years, the April issue of *THE JOURNAL*, Michigan State Medical Society, has been made a "Cancer Number" with the cover, leading editorial and some of the articles provided by or through the efforts of this Committee.

The Cancer Comment page in *THE JOURNAL*, Michigan State Medical Society, has been continued, the contents being supplied by this Committee.

The Committee has continued to urge each county or district medical society to have at least one cancer meeting annually, or to have cancer subjects discussed at meetings throughout the year. Several such local meetings have been held.

The Committee was represented at three national cancer meetings during the year: The Public Health Cancer Association in Boston, Mass., in November, 1948; The National Cancer Conference in Memphis, Tenn., in February, 1949; and The National Rural Health Conference in Chicago, Illinois, in February, 1949.

The secretary's office has answered many inquiries about the Committee's work and the cancer program in Michigan from many parts of the Country. The Hillsdale Plan in particular has aroused keen interest from widely separated areas.

While the number of requests for speakers has not been as many as in previous years, all such calls have been taken care of. This reduction is considered to indicate that more and more of these requests are being filled locally, a very desirable situation from the standpoint of meeting local needs by local groups.

The co-operating organizations, the Michigan Division and the Southeast Michigan Division, American Cancer Society, and the Michigan Department of Health have contributed materially to the Committee's program during the year. Their help is gratefully acknowledged.

The Cancer Control Committee urges the development of Hillsdale Plan types of physical examination programs in every county in Michigan. It requests all physicians to increase their interest in and ability to diagnose cancer in their own patients. It urges the public to seek medical examinations by their own physicians as the best way of finding cancer in early and curable stages. It strongly recommends greater efforts on cancer education as the most valuable means of controlling cancer now available to the great mass of the population.

Respectfully submitted,

N. F. MILLER, M.D., *Chairman*  
F. L. RECTOR, M.D., *Secretary*  
F. A. COLLIER, M.D., *Advisor*  
M. R. BURNELL, M.D.  
D. C. BURNS, M.D.  
L. A. CAMPBELL, M.D.  
E. I. CARR, M.D.  
M. A. DARLING, M.D.  
E. A. HAND, M.D.  
A. E. HEUSTIS, M.D.  
L. E. HOLLY, M.D.  
A. A. HUMPHREY, M.D.  
W. H. HURON, M.D.  
W. A. HYLAND, M.D.  
C. H. KEENE, M.D.  
H. F. MATTSON, M.D.

A. B. MCGRAW, M.D.  
H. L. MILLER, M.D.  
H. M. NELSON, M.D.  
C. A. PAYNE, M.D.  
H. M. POLLARD, M.D.  
H. W. PORTER, M.D.  
H. R. PRENTICE, M.D.  
H. L. SIGLER, M.D.  
H. L. SMITH, M.D.  
H. J. VANDENBERG, M.D.  
B. E. LUCK, D.D.S.

## ANNUAL REPORT OF COMMITTEE ON VENEREAL DISEASE CONTROL—1948-49

Two regular meetings of the V. D. Control Committee were held during the past year. Both were held at 2:00 o'clock Sunday afternoon at the Porter Hotel on November 14, 1948 and April 3, 1949. An additional full day's meeting is planned for July.

At the first meeting on November 14, 1948, Dr. Cowan reported on the 13 transcriptions prepared by Columbia University for dissemination by way of radio as V. D. educational material. These transcriptions are very well prepared and our committee recommended that they be referred to the Scientific Radio Committee and Public Relations Committee of the MSMS for dissemination throughout the state, and that publicity of their availability be made to service clubs, Chamber of Commerce groups, et cetera.

Dr. Breakey reported that thirteen records were being prepared by Wayne University for the MSMS Public Relations Committee for sex education purposes and to be used in the public schools. These had been prepared with the assistance of the late Dr. H. A. Miller.

Mr. Dalrymple, of the Lansing Board of Education, presented a 16 mm. film on sex education prepared by the University of Oregon entitled "Growing Up." We felt that this was a very excellent presentation and that such visual means of sex education should be made available more extensively throughout the public schools.

The laboratories of the Michigan State Health Department requested our committee's approval of not reporting negative serologic results for syphilis to local health departments. Our committee felt that this time-saving procedure was justified.

Dr. Cowan reported on the present status of distribution of metal signs for educational purposes and the distribution of educational literature to physicians in Michigan. The committee suggested that in the future, distribution of literature needing the earnest attention of the medical profession should be preceded by publicity in *THE JOURNAL* MSMS or Secretary's Letter.

The status of follow-up examinations and treatment of patients discovered by draft boards as having venereal disease was discussed but since such draft examinations were already being restricted it was felt that no definite program would be indicated until decision had been made regarding the use of draft measures for filling vacancies in our military corps. Meeting adjourned at 5:30 P.M.

The second meeting of our committee was held on April 3, 1949. A review was presented by the chairman to the committee of the discussion and recommendations of the MSMS Maternal Health Committee regarding serologic tests for syphilis in pregnancy. That committee has recommended that a letter be sent to all physicians, who reported cases in which no Kahn had been taken on the mother during pregnancy, by the Michigan State Health Department with a statement to the effect that a letter was being sent at the suggestion of the committee. This action received the hearty endorsement of our V. D. Control Committee. Our committee also suggested that the Michigan Department of Health com-



municate with the executive committee of the Michigan Hospital Association urging that all birth certificates should not be signed until after delivery of the baby and that notation be made on the certificate whether or not a serologic test was made in or out of the hospital. The chairman and Dr. Cope discussed the status of complement fixation tests on spinal fluids which had been mailed to distant laboratories in cork stopper containers. This had been reported by the V. D. Clinic of the USPHS in Hot Springs, Arkansas, as causing a high incidence of false positive reactions. The discussion was educational but no action was taken.

Dr. Cowan reported on the distribution of penicillin on a replacement basis to physicians for treatment of diagnosed cases of gonorrhea as means of stimulating better reporting. The committee approved this action and recommended that a notice be included in the next MSMS Secretary's Letter calling attention of physicians to the poor reporting of venereal diseases and asking for better co-operation in the future.

Dr. Cowan also reported on last summer's experience with venereal disease education at County Fairs. He felt that this program had been very effective and outlined plans for continuing same this summer. The committee recommended that a monthly release on venereal disease be sent to the editors of every Michigan County Medical Society bulletin and to the editor of THE JOURNAL MSMS. Dr. Shaffer appointed Dr. Roy Holmes as chairman of a subcommittee to prepare these monthly notices. Other members of the committee were requested to send suggestions to Dr. Holmes.

Dr. Stiles was appointed chairman of a subcommittee along with Dr. Breakey acting with the assistance of Dr. Cowan to arrange for a trial program to be carried out preferably in Ingham County with the co-operation of the USPHS for stimulating better contact and source finding in venereal diseases.

Meeting adjourned at 5:50 P.M.

Respectfully submitted,

L. W. SHAFFER, M.D., *Chairman*  
R. S. BREAKEY, M.D., *Vice Chairman*  
K. A. ALCORN, M.D.  
R. C. CROWELL, M.D.  
A. C. CURTIS, M.D.  
RUTH HERRICK, M.D.  
R. H. HOLMES, M.D.  
H. L. KEIM, M.D.  
E. S. PARMENTER, M.D.  
FRANK STILES, M.D.  
O. D. STRYKER, M.D.

## ANNUAL REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH, 1948-49

The Committee on Industrial Health held no meetings during the current year and has engaged in no activities. There is, therefore, no report to submit.

Respectfully submitted,

H. H. GAY, M.D., *Chairman*  
A. L. BROOKS, M.D.  
W. P. CHESTER, M.D.  
HENRY COOK, M.D.  
W. A. DAWSON, M.D.  
V. S. LAURIN, M.D.  
K. E. MARKUSON, M.D.  
J. D. MILLER, M.D.  
N. W. SCHOLLE, M.D.  
C. D. SELBY, M.D.  
H. T. SETHNEY, M.D.  
M. W. SHELLMAN, M.D.  
E. C. SITES, M.D.  
F. B. WILLIAMSON, M.D.  
J. L. ZEMENS, M.D.

## ANNUAL REPORT OF COMMITTEE ON MENTAL HYGIENE—1948-49

Because of the great significance of the Committee's area its membership have practiced a deep sense of privilege and responsibility. Your Mental Hygiene Committee has held four meetings during the past year. The membership, individually and collectively, have continued to apply themselves to the ever-pressing problems of improving mental health legislation; furthering co-operation with lay groups on all community levels; developing public health education communications that make for useful counseling; extending medical efforts towards public helpfulness in terms of reverence for the dignity of the individual man; renouncing the inexpert use of the cinema, radio, video, and publications, involving mental health interests, working up Dr. Currier's "Outline for Psychiatric Examination for Interns, Residents, and General Practitioners"; and improving screening facilities for the selection of all medical personnel (Medical students, student nurses, attendants, ward help, business officers).

This year's committee work has been concentrated upon one major project: the continued development of a common front for all of Medicine. In all of its meetings your committee has attended to and upheld the principle: The comprehensive practice of medicine. Since there are only some 5,000 members in the American Psychiatric Association and less than one-tenth of that number in the American Psychoanalytic Association, it is evident that these specialists can accept only limited public obligation. Furthermore it would be a loss to our medical profession if these few specialists were to leave their difficult work of investigation to apply themselves entirely to overall public work. All men of medicine are in the position of having to take care of the emotional stresses and strains of the patients whom they are seeing regularly. Similarly, all of the medical faculty of every college find themselves under obligation to teach the comprehensive practice of medicine.

Your committee has constantly maintained that psychiatry is only at its best when it recognizes itself as an integral part of general medicine. The contiguous location of mental clinics in general hospitals, particularly of child psychiatry clinics in pediatric departments, is desirable from an educational standpoint. There are great rewards for maintaining this contact and heavy penalties for losing it. All of us physicians must depend upon past experiences that we have shared in common.

Having all of the major specialties significantly represented in all of our county medical societies' standing committees and in all of our community hospitals are effective ways of attending to the integration of the practice of medicine. Thus, it would represent progress for each county medical society to have a standing mental hygiene committee comprised of members of the various medical services.

Your Mental Hygiene Committee has had a leading position this year in striving to develop for our American Psychiatric Association an effective state medical society mental hygiene committee program that might be helpful for all of the states. Your committee observes that all physicians need most to develop more frequent personal meetings with a common purpose, and easier personal communications with a common "language."

The Social Committee of the United Nations General Assembly has taken a position of greatest consequence for our medical world: "The family is a natural and fundamental unit of society and is entitled to protection by society and the state." This measure of the meaning of "family" is well known to each and every one of our family physicians. The best mental hygiene that can be done is through the helping of the young husband and wife to create loving, truthful environments for their infants and children. Education to mental health, preventive psychiatry, the most effective of all psychotherapy, begins in the home. The veteran family



physician has learned from experience, has had his mind disciplined, to recognize the significance of family living for individual welfare and hence for public health. He is disposed from observation and effectation to attend to his patient in terms of the nature and needs of his patient's family. Whether we are ready to recognize it or not, truly it appears that all of us practitioners of medicine are, in a deep sense, family physicians. Whatever we accomplish in terms of any member of a family produces far-reaching effects upon every other member of the family. Every doctor-patient relationship is, by direct extension, a doctor-family relationship.

That vigorous action based upon our scientific love of truth continue to characterize all of our Michigan State Medical Society, is the sincerest desire of your Mental Hygiene Committee.

Faternally submitted,

J. M. DORSEY, M.D., *Chairman*  
R. GORDON BRAIN, M.D.  
F. P. CURRIER, M.D.  
A. B. GWINN, M.D.  
M. H. HOFFMAN, M.D.  
RALPH KERNKAMP, M.D.  
HAROLD KESSLER, M.D.  
R. A. MORTER, M.D.  
B. M. MURPHY, M.D.  
R. P. SHEETS, M.D.  
R. W. WAGGONER, M.D.

#### ANNUAL REPORT OF THE CHILD WELFARE COMMITTEE—1948-49

The Child Welfare Committee reports a successful year. Two formal meetings were largely given over to further consideration of the revision of the manual on "Immunological Procedures." The development of combined antigens made it advisable to proceed slowly and with careful consideration before going to press with the new manual. This was necessary from the standpoint of reaching agreement as to the best plan of immunization and also to allow sufficient time for the State Laboratory to, in part, switch over from single to multiple antigens.

The close co-operation between this committee, the Academy of Pediatrics (Michigan Branch) and the Michigan Department of Health has made possible the publication of the revised edition covering recommended immunological procedures, a copy of which has been placed in the hands of every physician.

The final meeting of the year gave special consideration to the problem of prematurity, at which time certain phases of the problem were presented by representatives from the Committee on Fetus and Newborn of the Academy of Pediatrics. It is recommended that the Child Welfare Committee give this problem further consideration during the coming year.

Respectfully submitted,

ROCKWELL M. KEMPTON, M.D., *Chairman*  
MOSES COOPERSTOCK, M.D., *Vice Chairman*  
R. J. ALBI, M.D.  
CARLETON DEAN, M.D.  
AVISON GANO, M.D.  
A. E. HEUSTIS, M.D.  
K. P. HODGES, M.D.  
R. J. MASON, M.D.  
A. L. RICHARDSON, M.D.  
R. S. SIMPSON, M.D.  
L. P. SONDA, M.D.  
J. E. WEBBER, M.D.

#### ANNUAL REPORT OF COMMITTEE ON IODIZED SALT—1948-49

During the year we have kept in touch with the national picture through meetings with the National Goiter Study Group and with the United States Public

Health Association. Since the bill which was introduced in Congress a year ago by Representative Bolton of Cleveland, relative to the iodization of table salt, was not acted upon, agreement was made with the Salt Producers Association to withhold any further attempts at legislation. This would permit the Salt Producers Association to develop a co-operative campaign of education, advertising and sales promotion to stimulate the use of iodized salt. Material for use in this campaign is being prepared by the Goiter Study Committee.

The Executive Meeting of our Michigan State Iodized Salt Committee was held on May 27, 1949, with Dr. O. P. Kimball being present to explain the national picture and to help in our plan for recommending to you a re-survey of the Michigan schools previously studied. The importance of iodine in animal husbandry was discussed, as well as the great need for iodized salt in our state. A plan was formulated whereby one of our members was to speak at the Association of State Health Officers, if permitted, to encourage their efforts. Plans for a scientific exhibit to be used at medical meetings were formulated. Sentences and slogans to be used in promoting the sale of iodized salt were formulated, such as, "Goiter is Easy to Prevent—Use Iodized Salt."

It is to be hoped that this educational sales program will help to make the use of iodized salt universal in Michigan.

Respectfully submitted,

R. D. MCCLURE, M.D., *Chairman*  
H. A. TOWSLEY, M.D., *Vice Chairman*  
L. M. BOGART, M.D.  
B. E. BRUSH, M.D.  
L. W. GERSTNER, M.D.  
D. E. LIGHTY, M.D.  
R. C. MOEHLIG, M.D.  
G. P. MOORE, M.D.

#### ANNUAL REPORT OF COMMITTEE ON GERIATRICS—1948-49

The Geriatrics Committee was only able to hold one meeting during the year. The most important subject for consideration and study concerned the provision for care of the ill or bedridden aged. While some of the members of the Committee were able to report fair to good facilities for such care, most counties, it seemed apparent, were woefully lacking in good and economical facilities for the care of these older people. It was concluded that the greatest good that the Committee could hope for would be to ascertain, at the county level, what the exact facilities were and to attempt to give publicity from time to time to this serious shortage.

It was thought advisable to ask each county society to form a small committee to consider the over-all problems in geriatrics, which committees could be asked for information from time to time so that the exact local conditions might be clearly known. As a part of the over-all committee functions, a Diabetic Control Committee was recommended by the Geriatrics Committee, and has been appointed to conduct a diabetic detection drive this coming year. It is the hope of the Geriatrics Committee that we can all co-operate as much as possible with the diabetic detection drive.

Respectfully submitted,

WARREN B. COOKSEY, M.D., *Chairman*  
H. H. RIECKER, M.D., *Vice Chairman*  
F. W. BASKE, M.D.  
M. G. BECKER, M.D.  
C. B. BEEMAN, M.D.  
B. B. BLUM, M.D.  
J. R. BRINK, M.D.  
B. M. BULLINGTON, M.D.  
B. B. BUSHONG, M.D.  
M. S. CHAMBERS, M.D.  
J. M. DORSEY, M.D.

L. E. IRVINE, M.D.  
R. K. HART, M.D.  
D. C. ENSIGN, M.D.  
R. A. JOHNSON, M.D.  
F. D. JOHNSTON, M. D.  
P. B. KILMER, M.D.  
P. L. LEDWIDGE, M.D.  
W. M. LEFEVRE, M.D.  
J. D. LITIG, M.D.  
MARK MARSHALL, M.D.  
E. W. MEREDITH, M.D.  
J. M. MURPHY, M.D.  
G. C. THOSTESON, M.D.  
F. C. SWARTZ, M.D.  
W. J. WILSON, JR. M.D.  
L. E. VERITY, M.D.  
C. D. CAMP, M.D.

#### ANNUAL REPORT OF THE COMMITTEE ON DISTRIBUTION OF MEDICAL CARE—1948-49

The committee did not hold a meeting during this period. There were no problems turned over to this committee by the Secretary for consideration.

During the year it is our opinion that problems of Distribution of Medical Care have been well taken care of by other committees.

Respectfully submitted,

C. W. COLWELL, M.D., *Chairman*  
R. H. BAKER, M.D.  
H. F. DIBBLE, M.D.  
E. B. MILLER, M.D.  
D. R. SMITH, M.D.  
R. A. SOKOLOV, M.D.

#### ANNUAL REPORT OF THE PUBLIC RELATIONS COMMITTEE—1948-49

The over-all Public Relations Program, patterned much as in preceding years, has been led and directed by the forty-four members of the Public Relations Committee and the four Public Relations Sub-Committees whose detailed reports follow this report.

The objectives of the Public Relations activity of the Michigan State Medical Society are still basically the same as when the expanded program began a few years ago: first, to encourage such ethical measures and procedures which will publicly prove that organized medicine has the public welfare as its uppermost concern; and second, to make known truths regarding the science and practice of medicine toward the end that the American system of medicine and its principles may meet with popular acceptance and a more complete accord between the public and the medical profession be gained.

In working toward these objectives a basis has been provided upon which the Special Education Campaign has been built and a joining of effort with the AMA as a leader among the states has been made possible.

##### Intra-Organizational Activity

Much of our work has been done in close co-ordination with the Legislative Committee and the Special Committee on Education, in an expanded program to oppose Compulsory Health Insurance Bills as introduced in Congress. As of June 15, 1949, over 900,000 pamphlets and articles were distributed to implement the educational program, 1,021 talks have been known to be given to lay and medical audiences on this subject. The obtaining and distribution of such literature was handled through the Public Relations office. As a result of this program, it is accurately estimated that 50,000 letters in opposition to any form of Socialized Medicine have reached Michigan's Congressional representatives in Washington.

Co-operation of the Public Relations Committee with other intra-organizational groups may be seen in the following brief paragraphs:

*Woman's Auxiliary.*—Programs of the Woman's Auxiliary have been expanded and co-ordinated to include strong activity in distributing literature and arranging for talks to be given on the subject of Socialized Medicine, contacting lay persons, individually and in groups, regarding the dangers of such legislation. A pamphlet, "It's No Bargain," designed to present the subject to women has been developed and will be distributed.

*Commission on Health Care.*—Many requests for the Medical Associates brochures, which was developed last year by the Commission are being received from secondary schools, colleges, vocational counselors, and individuals interested in these professions and vocations. An estimated 15,000 copies of the brochure have been distributed and placed in schools to date.

*Committee on Rural Health.*—The second annual Michigan Rural Health Conference, sponsored by the Michigan State Medical Society in co-operation with forty-one other interested organizations, was held in East Lansing in September, 1948. The program preparations were made by the Rural Health Committee and the Public Relations Committee. Such speakers as United States Senator Homer Ferguson, General Paul R. Hawley, Blue Cross Administrator, and others highlighted an effective 2-day program. Excellent coverage of the Conference was given by Michigan newspapers and radio stations who used the numerous releases and feature articles furnished them. A detailed report of the Conference has been published and made available to all who are interested in rural health.

The third Rural Health Conference will be held in Grand Rapids in October. The Michigan Foundation for Medical and Health Education, Inc., has taken over the financial sponsorship of this meeting with the active assistance of the Michigan Health Council.

*Health Survey Advisory Committee.*—The initial phases of the Michigan Health Survey, conducted by the Social Research Service of Michigan State College for the Michigan State Medical Society has been completed and a report of the information obtained is being compiled.

*Committee on Scientific Radio.*—With the assistance of this Committee and the Public Relations Committee, arrangements were made for doctors of medicine throughout the State to participate in the University of Michigan "Medical Talks" radio program.

*Committee on Awards.*—Recognitions of outstanding lay and medical persons made by this Committee have been widely publicized through the various public relations media available to the Public Relations Committee. Awards have been made to:

*Distinguished Health Service Award.*—Mr. W. K. Kellogg, Battle Creek.

*Health Service Awards.*—Mr. James S. Riley, Battle Creek; Mr. Burton R. Laraway, Jackson; Mrs. Hall Blanchard, Jackson; Mr. Carl M. Saunders, Jackson.

*Committee on Rheumatic Fever Control.*—Aid was given to this Committee in the preparation of a series of news releases regarding the Rheumatic Fever Control program, operation of the Centers, et cetera.

##### Use of Media

In addition to public relations activities in co-operation with various groups and individuals within the Medical Society, a great deal of work has been done with lay and health organizations throughout the United States. This activity has resulted in closer liaison with many groups and in placing the Michigan State Medical Society in a favorable light with many civic leaders, newspaper editors, political leaders, et cetera. Advice and assistance in establishing public relations programs has been requested in a number of instances from several state and county medical societies. This friendly relationship with leaders in business, professional organizations and policy making bodies has done much to increase the effectiveness of our public relations efforts.

Some of the ways in which the Medical Society has



made itself and its policies well known may best be illustrated by the following examples of the use made by the Public Relations Committee of the various public relations media:

**Cinema.**—The film "Lucky Junior," produced by the Jam Handy Organization for the Michigan State Medical Society, has completed its circuit in Michigan Theaters and has been previewed throughout the country with excellent results. Among those interested were Health Departments, Medical Societies, Visual and Auditory Aid departments of Educational Institutions, Preview Services, Board of Education, Civic Libraries, and others. Interest in purchasing or renting the film was expressed in many instances.

A second film, "To Your Health," is now being produced by the Jam Handy Organization. Using Socialized Medicine as a theme, this film can be expected to be the equal of the successful "Lucky Junior." Upon completion, it will be distributed to 400 theaters in Michigan under the same plan utilized last year.

**Radio.**—The "Tell Me, Doctor" series has continued on successfully and is being aired on twenty-one Michigan radio stations, as well as many stations in other states including Virginia, West Virginia and Oklahoma.

Plans for future "Tell Me, Doctor" programs tentatively call for the addition of another voice to the scripts in order to stimulate additional listener interest in the series.

Other radio talks were made by individual doctors of medicine in Michigan on various subjects; chief among them in point of numbers was the subject of socialized medicine, and the general health.

**Newspaper.**—The hundreds of clippings received from the clipping services indicate that the routine and special news releases on the Annual Session, other major meetings of the Society, speakers, programs, awards, et cetera, are appearing in the press of the State and elsewhere.

In carrying out the Michigan State Medical Society advertising program, four ads were placed in 105 selected newspapers in Michigan. Several State Medical Societies have shown an interest in this advertising program with a view towards adopting it for their own use.

**Public Speaking.**—Speakers bureaus have been set up in many County Medical Societies and have proved very successful in supplying speakers for medical and lay group meetings. Hundreds of talks on Socialized Medicine have been given before civic and service groups during the first half of 1949, with many more scheduled for the remainder of the year. The public relations program of the MSMS received additional honors by virtue of two speeches presented by the MSMS Public Relations Counsel during the Annual Session of the AMA held in Atlantic City. The talks covered various aspects of Michigan public relations operations.

The above activity in the field of public speaking is only a step in the direction toward which this committee is pointing. The goal for the future is that of a large statewide speakers bureau consisting of well-informed, well-trained public speakers from among the members of the profession and interested laity. Ultimately, it should be much easier to supply speakers on medical and socio-economic subjects for meetings any place in the state upon a few days' notice. Further plans along this line include a training school for speakers planned for the Annual Session, on September 22.

**Publications.**—Several publications, listed below, were distributed during the year while additional distribution was made of publications prepared by the AMA and of the Medical Associates brochure prepared by the Commission on Health Care.

"The Country Doctor Answers the Ewing Report"—J. S. DeTar, M.D.

"Michigan's Progressive Voluntary Health Program"—Hugh W. Brenneman.

"American Health Planning Avoids Compulsion"—C. E. Umphrey, M.D.

"The Issue of Compulsory Health Insurance"—A. E. Schiller, M.D.

"It's No Bargain"—A pamphlet published by the MSMS for use by the Woman's Auxiliary in connection with the C.A.P. Plan.

"Co-operation with the American People"—A plan to implement a campaign of education regarding Health Services for the American Public.

The PR department contributed several articles to THE JOURNAL as well as a monthly page entitled "PR In Practice."

Another publication prepared and distributed was the report of the 2nd Annual Rural Health Conference held in East Lansing.

**Displays.**—Several displays were developed during the past year. The effectiveness of the "Tell Me, Doctor" radio series was increased through the distribution of an attractive easel type display card for use in doctors' offices and waiting rooms in all areas where the program is aired.

The color poster "The Doctor" by Fildes and prepared by the AMA was distributed throughout the state to medical societies and other interested groups for display purposes.

The Michigan State Medical Society was among the exhibitors at the Postgraduate Clinical Institute held in Detroit in March. A continuous slide machine was used as background for display of Socialized Medicine materials available through the MSMS office.

**National Organizations.**—Attendance, participation, and co-operation in programs of the American Medical Association, the National Conference on Medical Service, the National Rural Health Conference, and other national groups have been carried out to the fullest extent. On several occasions speakers from the Michigan State Medical Society appeared on national radio forums, convention programs and conference platforms.

#### Advice and Assistance in Public Relations

The additional work of the Public Relations office as a result of an expanded program and the institution of the CAP program required the addition of several members to the staff. R. F. Staudacher joined the organization in January as Associate Public Relations Counsel while five Public Relations Field Secretaries were employed to carry out the organizational and liaison work of the CAP program.

Wallace-Lindeman, Inc., of Grand Rapids, has continued to serve as advertising counsel with excellent advice and assistance.

Jam Handy Organization of Detroit has served as consultant in visual and auditory aids as well as producing the second MSMS motion picture.

The William L. Hermes Co., Inc. of Lansing has been invaluable in the mailing and distribution of the 900,000 pamphlets and materials. They have also served well as advisers in printing problems and projects.

Three years ago a long-time Public Relations Program was designed. Since that time much of the program has become an actuality and has merited the confidence of the House of Delegates and The Council by developing effectively in every phase of Public Relations.

The instructions of the House of Delegates have been carried out, and all the actions of the Public Relations Committee have been thoroughly reviewed by the Executive Committee of The Council, which has authorized the expenditure of funds only after exhaustive review.

Respectfully submitted,

L. W. HULL, M.D., *Chairman*

C. L. CANDLER, M.D., *Vice Chairman*

HUGO A. AACH, M.D.

G. T. AITKEN, M.D.

J. F. BEER, M.D.

E. W. BLANCHARD, M.D.

A. F. BLIESMER, M.D.

A. S. BRUNK, M.D.



## COMMITTEE ANNUAL REPORTS

G. C. CLIPPET, M.D.  
L. FERNALD FOSTER, M.D.  
W. G. GAMBLE, M.D.  
L. J. GRAVELLE, M.D.  
S. W. HARTWELL, M.D.  
L. T. HENDERSON, M.D.  
W. J. HERRINGTON, M.D.  
F. P. HUSTED, M.D.  
KENNETH JOHNSON, M.D.  
ROY C. KINGSWOOD, M.D.  
J. S. LAMBIE, M.D.  
W. E. LEMIRE, M.D.  
J. J. LIGHTBODY, M.D.  
J. E. LIVESAY, M.D.  
J. J. McCANN, M.D.  
O. B. MCGILLICUDDY, M.D.  
H. J. MEIER, M.D.  
E. B. MILLER, M.D.  
B. T. MONTGOMERY, M.D.  
E. S. OLDHAM, M.D.  
G. T. PATRICK, M.D.  
C. A. PAYNE, M.D.  
L. A. PRATT, M.D.  
W. Z. RUNDLES, M.D.  
R. F. SALOT, M.D.  
G. B. SALTONSTALL, M.D.  
A. E. SCHILLER, M.D.  
J. E. SPENS, M.D.  
A. H. STEELE, M.D.  
R. W. TEED, M.D.  
ARCH WALLS, M.D.  
C. L. WESTON, M.D.  
JOHN E. WEBSTER, M.D.  
T. P. WICKLIFFE, M.D.  
D. B. WILEY, M.D.  
H. B. ZEMMER, M.D.

### ANNUAL REPORT OF THE COMMITTEE ON PUBLIC RELATIONS PUBLICATIONS—1948-49

A meeting of the Committee of Public Relations Publications was held on January 17, 1949. The publications published in 1948 were reviewed, and the matter and form of future publications was discussed. The integration of this Committee's efforts with those of the Special Committee on Education was also discussed. Following is a report on the activities of the Committee:

1. The Medical Associates brochure was distributed widely throughout the state with several thousand requests being received from interested persons throughout the United States.

The brochure has been reviewed in editorial columns of many newspapers and magazines thereby stimulating an additional interest in this attractive pamphlet. "Medical Economics" ran a piece about the booklet in one of their issues with the result that requests for copies were received from nearly every state in the union.

2. Requests for copies of the revised Medical Plan for Michigan were received from several state medical societies who were contemplating establishment of a system like that in operation here.

3. The activities of the second Rural Health Conference were summarized in a brochure distributed several months after the Conference proper. The booklet presented short digests of the speeches given as well as proposals and suggestions made for improving the health of the rural communities. Copies were distributed throughout Michigan and to various organizations and individuals outside the state.

4. Several feature articles were prepared for THE JOURNAL showing the voluntary progressive efforts of the medical profession in Michigan.

5. Public relations activities were capsuled in the "PR in Practice" column of THE JOURNAL. Many of the accomplishments and new developments of the Public Relations Office were thus chronicled for the readers of THE JOURNAL.

6. The Committee made several recommendations re-

lative to the type of literature to be used in the educational campaign against socialized medicine which were carried out by the Special Committee on Education.

Respectfully submitted,

KENNETH JOHNSON, M.D., *Chairman*  
A. F. BLIESMER, M.D.  
L. FERNALD FOSTER, M.D.  
J. E. LIVESAY, M.D.  
L. T. HENDERSON, M.D.

### ANNUAL REPORT OF THE COMMITTEE ON NEWSPAPERS—1948-49

The Committee on Newspapers held a meeting on January 17, 1949, to make plans for the role newspapers would play in the overall public relations program of the MSMS as well as to determine the part that the press would play in implementing the educational efforts of the Special Committee on Education of the MSMS.

Activities of the Committee included:

1. *Advertisements*.—Four ads (2 column by 8 inches) were placed in forty-nine daily newspapers and fifty-six weekly newspapers in Michigan, as well as in the *Michigan Farmer*. This makes a total of 426 advertisements reaching more than 2,000,000 readers during the first six months of 1949.

Additional advertising was placed in local newspapers by several county medical societies in Michigan.

2. *Newspapers*.—Advance newspaper releases were sent to all newspapers (384 in all) in Michigan on the MSMS Annual Session, the Michigan Postgraduate Clinical Institute and the Michigan Rural Health Conference and return clippings testified that the releases were well accepted.

Special releases were also prepared on speakers at the various meetings as well as home town stories on newly appointed members of MSMS Committees. Several releases went out relative to several commendable resolutions and bills introduced in the 1949 Michigan Legislature by friends of organized medicine.

The naming of "Michigan's Foremost Family Physician" was the occasion for several illustrated releases in the *Detroit Free Press* and the *Toledo Blade*. On the occasion of the presentation of this award the metropolitan newspapers of Detroit covered the event with stories and pictures.

The number of releases sent from MSMS during the year totalled more than 4,600.

3. *Clippings*.—The clipping services act as somewhat of a barometer of the acceptance of news releases by the newspapers of the state. During the year, clippings were returned to the PR office at the rate of approximately 425 per month for a yearly total of more than 5,100. This is indicative of good support from the press of the state.

4. *Health News Column*.—This feature was supplied in mat form to 253 newspapers in Michigan each week through February 9, 1949. Up to the time of its discontinuance the column had appeared approximately 6,000 times during the year.

Respectfully submitted,

C. L. WESTON, M.D., *Chairman*  
G. T. AITKEN, M.D.  
J. J. LIGHTBODY, M.D.  
H. J. MEIER, M.D.

### ANNUAL REPORT OF THE COMMITTEE ON RADIO—1948-49

The Committee on Radio formulated the plans and policies for utilization of radio time to the best possible advantage. In addition they discussed ways and means of utilizing radio and television in the program of education conducted by the Special Committee on Education. Following is a record of the activities carried out:



## COMMITTEE ANNUAL REPORTS

1. The "Tell Me, Doctor" program was continued during 1948-49 with stations WABJ, Adrian and WFYC, Alma being added to the outlets for this popular health broadcast. In Detroit the program made a change from CKLW to the facilities of WJBK where it is now heard in an evening broadcast.

Other stations carrying the program in Michigan are: WDBC, Escanaba, WOAP, Owosso, WELL, Battle Creek, WHLS, Port Huron, WJIM, Lansing, WKZO, Kalamazoo, WATZ, Alpena, WLAV, Grand Rapids, WDMJ, Marquette, WIBM, Jackson, WATT, Cadillac, WHDF, Calumet, WMPC, Lapeer, WMRP, Flint, WHFB, Benton Harbor, WHRV, Ann Arbor, WJPD, Ishpeming, and WBCM, Bay City.

This program is also being used regularly over four stations in Virginia by the Medical Society of Virginia. It is presented over WCHS in Charleston, West Virginia, while two major radio stations in Oklahoma also use the series which originates in Michigan.

During the year requests for prices, sample scripts and other information on the "Tell Me, Doctor" series have been received from state or county medical societies in New York, Tennessee, Mississippi, Florida, Pennsylvania and Iowa.

2. The University of Michigan radio program "Medical Talks" is broadcast in co-operation with the Michigan State Medical Society. It consists of thirty-nine fifteen-minute transcribed broadcasts by doctors of medicine and is heard over eight stations for a total of 312 separate broadcasts.

3. Special broadcasts were presented from time to time such as the broadcasts during the MSMS Annual Session and those emanating from the Michigan Rural Health Conference. In addition the facilities of WKAR, East Lansing, were used for several broadcasts.

L. Fernald Foster, M.D., Secretary of the MSMS, participated in the AMA series of broadcasts over the NBC network when he spoke on the broadcast of April 23, 1949. His subject was the "Michigan Medical Service."

4. News releases are routinely used by radio stations at the same time they are released to newspapers.

5. Use of radio by local organizations: Several county medical societies sponsor or approve local radio programs.

Respectfully submitted,

C. A. PAYNE, M.D., *Chairman*  
C. L. CANDLER, M.D.  
W. G. GAMBLE, JR., M.D.  
W. J. HERRINGTON, M.D.  
R. W. TEED, M.D.

### ANNUAL REPORT OF THE COMMITTEE ON CINEMA—1948-49

The Committee on Cinema met on several occasions to determine plans for integrating motion pictures with the master plan of public relations for the Michigan State Medical Society. The following progress was made:

1. The first motion picture of the Michigan State Medical Society, "Lucky Junior" has been shown in most of the commercial theaters in Michigan during the time it has been in distribution. The run of commercial theaters will be completed later this year after which time it will be available in 16 mm. prints for showings before interested groups and organizations in Michigan.

Requests for previews and showings of the film were received from 32 individuals and organizations during the year. These requests represented 14 states, Canada, and Hawaii.

It is estimated that this initial motion picture venture of the MSMS will have been seen by more than one million persons before the end of this year.

The following state medical societies asked for information regarding rental or purchase of "Lucky Junior": Illinois, Texas, Oregon, Virginia, New York and the Territory of Hawaii.

2. Production of a second film, tentatively titled "To Your Health," dealing with socialized medicine, occupied much of the Committee's time during the early part of this year. It was decided that a film presenting the value of voluntary medical care as against governmental compulsory medical care should be made at the earliest possible date.

The production of this film was given to the Jam Handy Organization, of Detroit, producers of "Lucky Junior."

The film script was reviewed by the committee late in May and actual production on the 10-minute film is now under way.

When completed, the picture will be shown in 400 commercial theaters in the State of Michigan. Several 16 mm. prints of the same film will be available for showing before labor and other interested groups upon request to the MSMS. The film will also be available for use by the AMA and other interested groups throughout the United States on a rental basis.

Respectfully submitted,

ARCH WALLS, M.D., *Chairman*  
R. F. SALOT, M.D.  
A. E. SCHILLER, M.D.

### ANNUAL REPORT OF ETHICS COMMITTEE—1948-49

The Ethics Committee has had no formal meetings during the past year. Only two matters have been brought to its attention, both of which appear to be problems that can and should be settled on a local basis, and an honest effort to do so is being made by the Counties involved.

In case satisfactory settlement is not accomplished, or should an appeal be made, this Committee stands ready to assume its duties as provided for in our Constitution and By-Laws.

Respectfully submitted,

R. S. MORRISH, M.D., *Chairman*  
A. J. BAKER, M.D.  
D. C. EISELE, M.D.  
L. C. HARVIE, M.D.  
H. B. HOFFMAN, M.D.  
G. B. HOOPS, M.D.  
L. J. MORAND, M.D.  
W. E. NESBITT, M.D.

### ANNUAL REPORT OF THE LEGISLATIVE COMMITTEE—1948-49

The Sixty-fifth Michigan Legislature convened on January 5 and adjourned on June 24, 1949. During this five-month period, 887 bills were introduced. Of the bills proposed, 64 dealt directly with or were of primary concern to the practice of medicine.

The 1949 Legislature enacted into law several important measures and amendments sponsored or approved by the Michigan State Medical Society. On the other hand, no proposed legislation that would have lowered medicine's high standard—and thereby would have been detrimental to the health and welfare of the people of Michigan—was enacted into law in the 1949 session.

#### Bills Passed by the Legislature

*Senate Concurrent Resolution No. 19*—Both Houses of the Legislature passed this resolution memorializing the Congress of the United States against enactment of any legislation for socialized medicine.

*S.B. 37*—Transfer jurisdiction of state hospitals for the mentally ill to the Department of Mental Health. This bill had 36 amendments made to it during its trip through both Houses of the Legislature with the final act a diluted skeleton of the original proposal. The bill permitting osteopaths to recommend commitments to state institutions was signed by Governor Williams on June 17.



**S.B. 91**—As passed, this bill provides for immunization by health departments of those children unable or unwilling to obtain these services from the practicing physician. It is little changed from existing practice. Certain objectionable features of the measure were eliminated and the bill carried all amendments requested by the MSMS. Signed by the Governor.

**S.B. 140 & S.B. 141**—Both of these bills were sponsored by the Michigan Hospital Association and were approved by the MSMS. The acts now authorize that hospital rates under the Crippled and Afflicted Children Acts are to be paid on the basis of a maximum of \$12.00 per day for acute care and a maximum of \$8.00 per day for convalescent cases. Signed by the Governor.

**S.B. 121**—(Periodic Hearing Tests) S.B. 121 which provides that the children of Michigan be given periodic hearing screening tests under the direction of the State Health Commissioner, passed the House where several amendments recommended by the MSMS were added. Before passing the House, the bill was shorn of the \$10,000 appropriation which had previously been placed upon it. The bill is now law, but funds with which to operate it are limited to experiment funds as in the past. However, the next session of the Legislature will undoubtedly be asked for funds with which to carry out the provisions of the act. Signed by the Governor.

**S.B. 106**—Provides for payment to counties for hospital care to be made upon the approval of county departments of social welfare rather than probate courts. This is current practice. Signed by the Governor.

**S. B. 115**—This measure exempts from the provisions of the inheritance tax funds transferred to foundations which exist exclusively for benevolent, charitable or educational purposes. Signed by the Governor.

**S.B. 172**—Authorized the establishment of a medical center commission in any city of over 500,000 population. Signed by the Governor.

**S.B. 239**—Provides reimbursement to counties for hospital care and other forms of relief from funds collected by county departments of social welfare from patients, legally responsible relatives or from estates of recipients. Signed by the Governor.

**S.B. 336**—The state appropriation measure for public health included a proviso for temporary handling by the Michigan Department of Health and Department of Public Instruction of federal funds made available under the congressional School Health Bill (S. 1411). The sum of \$1,113,801 would be made available to Michigan (out of a total of \$35,000,000). Michigan will have to match these funds by an equal amount. The federal bill provides that this money shall be used for the health and medical care needs of children 5-17 years of age, inclusive, whose parents are financially unable to pay. Signed by the Governor.

**H.B. 446**—This act requires that a program of instruction in sex hygiene be supervised by a person holding a teacher's certificate specifically qualifying such a person as a supervisor in this field. Signed by the Governor.

**H.B. 50**—This act authorizes commitment to and release from designated hospitals for narcotic and liquor addicts at discretion of the state hospital commission. Signed by the Governor.

**H.B. 117**—This proposal authorizes two or more cities, townships and incorporated villages to incorporate a hospital authority for planning, promoting, constructing, et cetera, a community hospital; maintaining and operating same; also authorizes levying of taxes for such a purpose, issuing of bonds and condemnation proceedings. Signed by the Governor.

**H.B. 272**—Defines and permits the writing of blanket sickness and accident insurance under specified rules. Signed by the Governor.

**H.B. 341**—Permits special educational programs in schools for mentally handicapped children. Signed by the Governor.

**H.B. 404**—Extends the instructional program and provides for funds to be taken from the state aid to

school districts rather than from the general fund to provide for education of the handicapped. Signed by the Governor.

**H.B. 428**—Provides that conspiring with another to commit a person to a mental institution shall be considered a felony. Signed by the Governor.

**H.B. 442**—This bill allows the Director of Mental Health to be either a physician legally registered in the State of Michigan with at least ten years' experience as a psychiatrist in the treatment of mental diseases, administrator of mental hospitals or mental health programs or an administrator with at least ten years' experience in the administration of mental hospitals or mental health programs. Signed by the Governor.

**H.B. 481**—Permits charges by the resident staff personnel of the University of Michigan Hospital if the patient has medical or surgical insurance coverage. Signed by the Governor.

#### Bills Which Failed to Pass the Legislature

**S.B. 292**—Sponsored by the MSMS, S.B. 292 would have changed the Medical Practice Act to allow for the exemption of interns and residents from the provisions of the licensing act for a period of not over six years. This bill was aimed to strike at the shortage of doctors of Medicine in this State, but undercover opposition kept S.B. 292 in the State Affairs Committee.

**S.B. 267**—Chiropractors would have been exempted from provisions of the Basic Science Act had this measure become law. Fortunately it made its demise in the Committee on State Affairs.

**S.B. 323**—Was the second in a trio of bills attacking the Basic Science Act. This asked that the *entire* Basic Science Act *be repealed!* It remained in the State Affairs Committee permanently.

**S.B. 240**—This bill, also to amend the Basic Science Act, was never approved by the MSMS and apparently was introduced at the request of the President of the Board of Examiners in Basic Sciences. It proposed several minor amendments to the Basic Science Act, none of which made any great change in the Act as it now stands. The bill died in committee.

**H. B. 514**—This bill proposed by the MSMS Maternal Health Committee asked for changes in the miscarriage act. It passed the House but died in the Senate Judiciary Committee.

**H.B. 483**—This was the *prize introduction of the 1949 session*. It would have made M.D.s out of Chiropractors by legislative action, without additional necessary education and training on the part of the chiropractors! As it was, the bill passed the House, thanks to a vigorous lobby by the chiropractors, but this dangerous measure stayed in the Senate State Affairs Committee. This bill will probably reappear at the next regular session. Needless to state, it must not pass.

**S.B. 331**—The University of Michigan, and the people in general, would have benefited from this bill asking for an appropriation of 2½ million dollars for construction of an out-patient clinic at Ann Arbor. There is still a possibility that funds for initial work on the project will be made available.

**H.B. 1**—Would have created a professional and vocational licensing division within the office of the Secretary of State. This was identical with S.B. 16. Both failed to come out of committee.

**S.B. 58**—Would have created a professional and vocational licensing section within the office of the Secretary of State. Much the same as H.B. 1 and S.B. 16. Was not reported out of committee.

**H.B. 7**—This would have abolished the Michigan Crippled Children's Commission and transferred its power to the Department of Health. S.B. 20, a companion Senate bill, was introduced and both measures died in committee.

**H.B. 97**—This proposal would have set up regulations for nurses, practical nurses and trained attendants. It died in the House committee.



*H.B. 242*—Greater contributions to county and city health departments by the State would have resulted from this bill. Refunds would have been made on a population and percentage basis. It never progressed further than Ways and Means Committee, although supported by a citizens committee of 100.

*H.B. 437*—Had it passed, this bill would have permitted the state to pay relief costs for anyone who had no legal settlement in a county of this state. This could have made Michigan a haven for indigents from other states. Died in committee.

*SCR No. 23*—This Concurrent Resolution was backed by the MSMS and asked that consideration be given to an increase in appropriations to the University of Michigan and the Wayne University College of Medicine so that the number of medical students could be increased. This admirable resolution was sent to the Business and Rules Committee where it was filed due to a subsequent introduction of S.B. 331 (see above).

*S.B. 43*—Would have extended the period of liability for hospital, medical and surgical services under the Workmen's Compensation Act. Died in Labor Committee.

*S.B. 101*—Would have amended the Workmen's Compensation Act to include all employes except domestic and farm laborers; provides penalty for failure to provide proper safeguards; also requires employer to furnish medical, surgical and dental care when needed and for as long as employe is recovering from injury. This bill passed its life in the Senate Labor Committee.

*S.B. 204*—\$2,265,000 would have been appropriated for construction of various facilities for a School of Veterinary Medicine at Michigan State College. The proposal died in the Senate Appropriations Committee.

*S.B. 247*—This was a perennial, providing for a licensing and regulation of all hospitals in the state under the State Health Commissioner. Vigorously opposed, it died in the Senate Committee on Public Health and Social Aid.

*S.B. 290*—This would have provided for the establishment of a Children's Clinic in Battle Creek by the Mental Health Department of the State. It never came out of Committee.

*H.B. 9*—Had it passed, this bill would have abolished the Tuberculosis Sanitarium Commission and transferred its powers to the State Health Department. S.B. 21 asking for the same powers was also introduced. Both bills failed to emerge from committee rooms.

*H.B. 15 and S.B. 14*—If passed, these proposals would have eliminated the Hospital Survey and Construction Office and transferred its function to the building engineering and management division of the Department of Administration. Both bills remained in committee.

*H.B. 74*—If passed this would have provided state reimbursement for care of feeble minded and epileptics in private homes, hospitals or institutions within Wayne County.

*H.B. 87*—As passed by the House, this measure would license and control instructors in electrolysis by the Board of Cosmetology. The bill died in a Senate Committee.

*H.B. 93*—Instruction in first aid in the eighth, ninth, and tenth grades would have been required if this bill had been reported out of the Education Committee of the House. It was not reported.

*H.B. 307*—Would have allowed World War II veterans to enter optometry without a Michigan license provided they had been licensed in another state. Died in Committee.

*H.B. 383 and S.B. 221*—Would have created an Alcoholic Commission to investigate, educate, and administer a program of rehabilitation, for alcoholics. Appropriation of \$50,000 was asked. Both measures failed to emerge from committees.

*H.B. 386*—Would have appropriated \$350,000 for addition to Saginaw County Hospital for additional bed space. Rests in Ways and Means Committee.

## Thanks

The Legislative Committee expresses appreciation to the intelligent and health-minded members of the Michigan Legislature for their courteous consideration of the Legislative problems of the medical profession and the fine reception they extended our representatives during the 1949 session. Chief among these have been the Chairmen of the Public Health Committees: In the Senate, Perry W. Greene of Grand Rapids; in the House, Howard R. Estes of Birmingham.

To Senators Colin L. Smith and Leo H. Roy and Representative Richard L. Thomson, the Legislative Committee is grateful for their introduction of and the successful passage of the Concurrent Resolution memorializing the United States Congress against enacting any legislation for socialized medicine. The Committee also extends its appreciation to Senator Harold D. Tripp for introducing a resolution requesting extra consideration for appropriations to extend facilities at the University of Michigan Medical School and at Wayne University College of Medicine so that more medical students may be accommodated and for S.B. 331 which would have accomplished much in this direction.

The Committee also wishes to express its sincere thanks to the members of the medical profession throughout the state who kept their friends in the Senate and the House well informed concerning medical legislation.

Our many thanks to William J. Burns, Hugh W. Brenneman, and Russell Staudacher who worked so hard to keep us informed and lay the groundwork for the Committee's efforts during the year.

Respectfully submitted,

L. A. DROLETT, M.D., *Chairman*  
E. R. ADDISON, M.D.  
W. E. BARSTOW, M.D.  
O. O. BECK, M.D.  
W. A. CHIPMAN, M.D.  
GEORGE CONOVER, M.D.  
R. J. DOUGLAS, M.D.  
E. F. DUCEY, M.D.  
H. B. FENECH, M.D.  
D. L. FINCH, M.D.  
C. B. GARDNER, M.D.  
NICOLA GIGANTE, M.D.  
T. K. GRUBER, M.D.  
W. H. HURON, M.D.  
E. D. KING, M.D.  
T. J. KANE, M.D.  
O. B. MCGILLICUDDY, M.D.  
W. F. MERTAUGH, M.D.  
H. L. MORRIS, M.D.  
W. E. NESBITT, M.D.  
C. L. A. ODEN, M.D.  
C. W. REUTER, M.D.  
E. W. SCHNOOR, M.D.  
J. G. SLEVIN, M.D.  
R. A. SPRINGER, M.D.  
F. G. SWARTZ, M.D.  
CHARLES TEN HOUTEN, M.D.  
F. L. TROOST, M.D.  
R. V. WALKER, M.D.  
GEORGE WATERS, M.D.  
A. V. WENGER, M.D.  
J. F. WHINERY, M.D.

## ANNUAL REPORT OF STATE VETERANS AFFAIRS COMMITTEE—1948-49

The year 1948-49 did not develop any problems for the State Veterans Affairs Committee to act upon, so consequently there was no meeting.

Respectfully submitted,

G. C. PENBERTHY, M.D., *Chairman*  
C. W. BRAINARD, M.D.  
O. A. BRINES, M.D.

## COMMITTEE ANNUAL REPORTS

B. P. BROWN, M.D.  
W. C. C. COLE, M.D.  
J. V. FOPEANO, M.D.  
JAMES H. FYVIE, M.D.  
E. O. GILFILLAN, M.D.  
R. F. HAGUE, M.D.  
F. R. KOSS, M.D.  
K. S. MCINTYRE, M.D.  
H. F. MULLENMEISTER, M.D.  
C. I. OWEN, M.D.  
F. H. POWER, M.D.  
W. G. ROBINSON, M.D.  
L. E. SEVEY, M.D.  
J. M. WELLMAN, M.D.  
STUART YNTEMA, M.D.

### ANNUAL REPORT OF THE STATE INTER-PROFESSIONAL COMMITTEE—1948-49

The State Interprofessional Committee has held no meetings for the year 1948-49. It is the chairman's recommendation that this committee be dropped until such time as its reactivation might be considered essential.

Respectfully submitted,  
W. W. BABCOCK, M.D., *Chairman*  
V. C. ABBOTT, M.D.  
C. S. CLARKE, M.D.  
S. T. FLYNN, M.D.  
R. G. LAIRD, M.D.  
E. C. MILLER, M.D.  
RICHARD SEARS, M.D.  
G. W. SLAGLE, M.D.

### ANNUAL REPORT OF THE BEAUMONT MEMORIAL COMMITTEE—1948-49

The committee unfortunately have a very negative and unsatisfactory report to make. A year ago we reported that Professor Lorch had completed a series of studies based on investigations carried out for four years and had available all the information that is ascertainable concerning the original plans of the Early House on Mackinac Island. We had hoped to have a meeting with Professor Lorch and with members of the Mackinac Island State Park Commission. This committee was empowered by the Council of the State Medical Society to embark on a fund-raising project to carry through with these plans in co-operation with the Mackinac Island State Park Commission.

I made numerous attempts to get in touch with the Chairman of that Commission and thus far he has failed to answer any of my letters, and consequently the matter is at this time in abeyance due to our failure to elicit further co-operation from the Commission. We will not relax in our efforts, which have been, to say the least, very disappointing in real results thus far to all members of your Memorial Committee.

Respectfully submitted,  
F. A. COLLIER, M.D., *Chairman*  
F. C. KIDNER, M.D.  
A. W. LESCOHIER, M.D.  
F. C. MAYNE, M.D.

### ANNUAL REPORT OF THE SCIENTIFIC RADIO COMMITTEE—1948-49

A meeting of the Scientific Radio Committee was held in Ann Arbor, Michigan, on December 17, 1948, at which time the various policies were reviewed relative to the medical broadcasts. It was agreed by the Committee that these broadcasts were of valuable nature and that they should be continued. The interpretation of "Scientific Radio" was taken in its broad sense, and, therefore, it was decided to include topics such as "Doctor, what are you doing for the people," which are of special interest to the public, and of good public relations value.

This year an attempt has been made to include scientific talks corresponding to Health Programs of the month, such as a talk on Diabetes, Cancer, Heart, Immunization, Rheumatic Fever, et cetera, in co-ordination with the Michigan State Medical Society drives on these diseases.

A total of thirty-four programs have been presented this year. They have been broadcast over nine stations in Michigan and one out-of-state radio station. The speakers have been selected from the membership of the Michigan State Medical Society, and the faculties of the University of Michigan Medical School and Wayne University College of Medicine.

For technical reasons it was felt that recordings of each talk should be made at the University of Michigan broadcasting station; each speaker to make arrangements with Professor Waldo Abbott.

It was understood by the Committee that these programs were to be a program of the University of Michigan and broadcast with the co-operation of the Michigan State Medical Society.

Respectfully submitted,  
J. M. SHELDON, M.D., *Chairman*  
R. E. BOUCHER, M.D.  
T. T. CALLAGHAN, M.D.  
J. T. McMILLIN, M.D.  
G. H. SCOTT, Ph.D.  
KENNETH TOOTHAKER, M.D.  
H. M. POLLARD, M.D., *Advisor*

### ANNUAL REPORT OF ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY—1948-49

No formal meetings of this Committee were held during the year. The chairman of the Committee met with the Executive Board of the Woman's Auxiliary during the fall of 1948 when routine matters concerning projects were discussed. Several conferences of the President of the Auxiliary, the chairman of this Committee and representatives of the Public Relations Committee were held in Grand Rapids and Detroit at which time plans for CAP activities of the auxiliary were discussed and outlined. Liaison between the Woman's Auxiliary and the members of the Committee has been maintained through the year by means of correspondence.

Respectfully submitted,  
C. ALLEN PAYNE, M.D., *Chairman*  
T. G. AMOS, M.D.  
ALFRED LABINE, M.D.  
C. W. OAKES, M.D.  
HOMER H. STRYKER, M.D.

### ANNUAL REPORT OF ADVISORY COMMITTEE TO NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, 1948-49

Two meetings have been held. The first was with Dr. H. E. VanRiper, Medical Director, National Foundation for Infantile Paralysis, at which time Dr. VanRiper outlined the intentions and plans of the National Foundation and requested the Committee to formulate a program for the use of the funds of the local chapters of the National Foundation in the State of Michigan.

At the second meeting this Committee made the following recommendations:

1. That the local chapters be advised to use their funds to supplement rather than replace those of agencies already set up to care for individuals afflicted with infantile paralysis.
2. Each local chapter should request the local county medical society to appoint a medical advisory committee to direct its medical program.

It shall be the function of the local medical advisory committee to:

- (a) Establish the need for medical care.
- (b) To estimate the extent and duration of the hospitalization and medical care.



- (c) To recommend the place where proper treatment should be carried out.
- (d) To audit all bills for medical services to be paid by the local chapter. The fees for medical services shall be those established by the Michigan State Medical Society for Governmental Agencies.
- 3. The determination of the need for financial assistance on the individual case shall be left to the local chapter.
- 4. The committee recommends that the local chapter pay hospital rates established in that hospital by Michigan Hospital Service. In the absence of such a rating the hospital shall be paid rates established for private patients.
- 5. In conclusion, the above recommendations are made to conserve the funds of the local chapter so that extra aid from the National Foundation will be required only in case of a severe epidemic and still no patient will go without needed care for lack of finances.

Respectfully submitted,  
 MARK F. OSTERLIN, M.D., *Chairman*  
 O. O. BECK, M.D.  
 F. E. CURTIS, M.D.  
 N. R. MOORE, M.D.  
 H. H. STRYKER, M.D.

#### ANNUAL REPORT OF COMMITTEE OF SIX TO STUDY BASIC SCIENCE ACT AND MEDICAL PRACTICE ACT, 1948-49

This Committee, composed of O. E. Madison, Ph.D., and Donald A. Kerr, D.D.S., representing the Michigan State Board of Examiners in the Basic Sciences; C. B. Gardner, M.D., and L. J. Gariepy, M.D., representing the Michigan State Board of Registration in Medicine; E. F. Sladek, M.D., and P. L. Ledwidge, M.D., representing the Michigan State Medical Society, was appointed by Dr. E. F. Sladek to study possible changes in the Medical Practice Act and Basic Science Act.

The Committee held three meetings and recommended one amendment to the Medical Practice Act. This amendment which would permit interns and residents to train in approved hospitals for a period of not more than six years without licensure to practice was introduced as Senate Bill 292 but died in the Senate Committee to which it was referred.

The Committee also considered some changes in the Basic Science Act. These changes were not completed by the Committee of Six because of lack of time for introducing legislation and hence were never introduced in the legislature as an official recommendation from the Michigan State Medical Society. The Committee of Six substantially agreed upon what those changes should be.

The Committee members from the three groups have co-operated wholeheartedly in the year's work. It is regrettable that the proposed amendment to the Medical Practice Act failed to pass the Legislature. However, close co-operation between these groups should be continued and should be productive of much benefit to organized medicine and to the public.

Respectfully submitted,  
 P. L. LEDWIDGE, M.D., *Chairman*  
 E. F. SLADEK, M.D.  
 O. E. MADISON, Ph.D.  
 D. A. KERR, D.D.S.  
 C. B. GARDNER, M.D.  
 L. J. GARIEPY, M.D.

#### ANNUAL REPORT OF COMMITTEE ON INCREASE OF MEDICAL STUDENTS, 1948-49

Your Committee met a number of times during the past year to discuss the possibilities of increasing the number of graduates from our medical schools. Study conferences were held with both deans. These revealed that the State of Michigan is a medical beggar. Many

Michigan citizens entering practice as M.D.'s come from medical schools in other states. On the basis of population, we should have the equivalent of one more school to supply our present medical personnel needs. The creation of such a new school would be excessively costly. To increase the number of graduates from our two existing medical schools would require additional facilities and clinical teachers.

The Wayne University College of Medicine needs are particularly for the pre-clinical teaching years and would require a modern science building with an increase of one third in its faculty. Such a building would cost some eight million dollars as a capital investment and would increase the number of graduates from sixty-eight to one hundred.

The needs at the University of Michigan Medical School are to increase the out-patient department for clinical instruction during the last two clinical years. This would require an expenditure of four million dollars and would increase the number of students from 140 to over 200. It would also involve a one-third increase in faculty budget.

If these needs could be accomplished, our two medical schools could accept an additional 100 students per year.

Our legislators were approached, resulting in the introduction of S.B. 331, which asked for an appropriation of two and one-half million dollars for the construction of an out-patient clinic at Ann Arbor. Because of the present financial status of the state this bill failed to come out of committee. Had it done so, the University of Michigan could have had a substantial increase in graduates from its medical school.

Nevertheless, the introduction of this bill accomplished a realization among our law-makers that it is possible to increase the number of medical students in our state, and that both our medical schools and the Michigan State Medical Society are interested in such a project. Future legislation may culminate in favorable action.

Respectfully submitted,  
 E. F. SLADEK, M.D., *Chairman*  
 J. S. DETAR, M.D.  
 L. FERNALD FOSTER, M.D.

#### PHYSICAL MEDICINE

(Continued from Page 877)

and rehabilitation, aided by many local agencies, to dispense physical medicine care in rehabilitative procedures. Wayne University has instruction in physical medicine in the undergraduate and post-graduate sphere, and the University of Michigan will soon have an organized instruction course. Both schools will have teaching under supervision of trained physiatrists. Hence, we can see the pattern of medical rehabilitation co-ordinate with the medical and surgical hospital services so that patients are assured maximum benefits at the earliest practical time after admission to the hospital.

In subsequent issues of THE JOURNAL, there will be published fundamental original articles acquainting the practitioner with practical aspects of physical medicine and rehabilitation.

These articles represent the papers given by their authors during the first Seminar in Physical Medicine and Rehabilitation in the State of Michigan, held February 4, 1948, in Bay City, Michigan.

MANA KESSLER, M.D.

# Michigan State Medical Society

## Roster 1949

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" Retired Members; "A" for Associate Members; all others are Active Members)

### Allegan County

Baker, Arthur G.....Allegan  
Brown, Lewis F.....Otsego  
Brunson, Eugene T.....Ganges  
Burdick, J. G.....Allegan  
Chase, Walter E.....Martin  
Cookill, C. C.....Douglas  
Dickinson, Clyde A.....Wavland  
Flinn, C. C.....(L) Allegan

Hudnutt, Orrin D.....Plainwell  
Johnson, E. B.....Allegan  
Kromer, Robert A.....Wayland  
Mahan, James E.....Allegan  
Medill, Wilbur C.....Plainwell  
Miller, K. C.....Saugatuck  
Ramseyer, Gladwin E.....Plainwell  
Rigterink, G. H.....(L) Hamilton

Rummel, Robert J.....Fennville  
Stuch, H. T.....Allegan  
Stuck, Olin H.....Otsego  
Ten Pas, Henry W.....Hamilton  
Van Ness, J. H.....(L) Allegan  
Van Der Kolk, Bert.....Hopkins  
Vaughan, W. R.....Plainwell  
Wiseman, Bertha C.....Allegan

### Alpena-Alcona-Presque Isle Counties

Arcsott, Edward F.....Rogers City  
Bunting, John W.....Alpena  
Burkholder, Harry J.....Alpena  
Cook, Hugh K.....Chicago, Ill.  
Constantine, Aeneas E.....Harrisville  
Foley, Arthur L.....Rogers City

Foley, Ernest L.....Alpena  
Hier, Edward A.....Alpena  
Jackson, William P.....Rogers City  
Kessler, Harold.....Alpena  
Leopard, Jack M.....Alpena  
Nesbitt, Wm. E.....Alpena  
O'Donnell, Francis J.....Alpena

Parmenter, E. S.....Rogers City  
Purdy, John W.....(L) Alpena  
Ramsey, Jac A.....Alpena  
Spens, James E.....Alpena  
Wagoner, Darwin E.....Lincoln  
Wienczewski, Theophile W.....Alpena

### Barry County

Bernard, Prosper G.....Delton  
Clarke, Daniel M.....Hastings  
Finnie, R. G.....Hastings  
Gwinn, Alexander B.....Hastings

Harkness, Robert B.....  
.....(L) Kenneth Square, Pa.  
Keller, Guy C.....(L) Hastings  
Lofdahl, Stewart.....Nashville  
Lund, C. A. E.....Middleville

Morris, Edgar T.....(L) Nashville  
Phelps, Everett L.....Hastings  
Slee, Vergil N.....Hastings  
Wedel, Herbert S.....Hastings

### Bay-Arenac-Iosco Counties

Alcorn, Kent A.....Bay City  
Alcorn, Marshall.....Bay City  
Allen, Arthur D.....Bay City  
Asline, J. Norris.....Essexville  
Austin, Justis.....Tawas City  
Ballard, W. R.....(E) Bay City  
Boulton, Arthur O.....(E) Gladwin  
Brown, George M.....Bay City  
Chapin, Frederick S.....Bay City  
Connelly, James C.....Bay City  
Criswell, Robert H.....Bay City  
Dardas, Michael J.....Bay City  
De Waele, Paul L.....Bay City  
Dolbee, Malcolm.....Standish  
Drummond, Fred H.....Kawkawlin  
Dumond, Vanny H.....Bay City  
Ely, Nina.....(L) Bay City  
Fisher, Robert E.....Bay City  
Foster, L. Fernald.....Bay City  
Freel, John A.....Bay City  
Gamble, William G., Jr.....Bay City  
Groomes, Charles A.....Bay City  
Grosjean, J. C.....(L) Bay City  
Gunn, Robert P.....Bay City  
Hagelshaw, G. L.....Bay City

Haitinger, K. S.....Auburn  
Hess, Charles L.....Bay City  
Heuser, Harold H.....Bay City  
Horowitz, S. Franklin.....Bay City  
Huckins, Edward S.....Bay City  
Huckins, Roger S.....Bay City  
Hughes, E. C.....(L) Bay City  
Husted, F. Pitkin.....Bay City  
Jacoby, Abe H.....Bay City  
Jens, Otto F.....Essexville  
Johnson, Orlen J.....Bay City  
Jones, Culver.....Bay City  
Keho, John.....(L) Bay City  
Kessler, Mana.....Bay City  
Kessler, Saba.....Bay City  
Knobloch, Howard T.....Bay City  
Lambert, Leslie A.....East Tawas  
Lerner, David.....Chicago, Ill.  
Loftin, Robert L.....Bay City  
McDonnell, Walter R.....Pinconning  
McEwan, John H.....Bay City  
MacPhail, Joseph C.....Bay City  
MacRae, L. Douglas.....Bay City  
Medvezky, Michael J.....Bay City  
Miller, Edwin C.....Bay City

Mitton, Orland W.....East Tawas  
Moore, George W.....(L) Bay City  
Moore, Neal R.....Bay City  
Mosier, Dwight J.....Bay City  
Pearson, Stanley M.....Bay City  
Reuter, Clarence W.....Bay City  
Roberts, Frederick J.....Bay City  
Scraftord, Royston E.....Bay City  
Shafer, Harold C.....Bay City  
Sherman, R. N.....Bradenton Beach, Fla.  
Smith, J. Campbell.....Bay City  
Staley, Hugh O.....Omer  
Stinson, Walter S.....Bay City  
Stewart, G. C.....Bay City  
Tarter, Clyde S.....Bay City  
Tompkins, Dana A.....Pinconning  
Tupper, Virgil L.....(R) Bay City  
Urmston, Paul R.....Bay City  
Vail, Harry F.....Bay City  
Warren, E. C.....(E) Bay City  
Wilcox, James W.....Bay City  
Wilson, Thomas G.....Bay City  
Wittwer, E. A.....(L) Bay City  
Zaremba, Aloysius J.....Bay City  
Ziliak, A. Lawrence.....Bay City

### Berrien County

Anderson, Bertha.....St. Joseph  
Anderson, H. B.....Watervliet  
Bailey, John.....Benton Harbor  
Bjork, Harold A.....St. Joseph  
Bliesmer, A. F.....St. Joseph  
Brown, F. W.....Watervliet  
Burrell, H. J.....Benton Harbor  
Cawthorne, H. J.....Benton Harbor  
Conway, Joseph.....Watervliet  
Conybeare, R. C.....Benton Harbor  
Cowdery, K. H.....St. Joseph  
Crowell, Richard C.....St. Joseph  
Dunnington, Ruel N.....Benton Harbor  
Eidson, Hazel.....Berrien Springs  
Emery, Clayton S.....St. Joseph  
Faber, Michael.....Benton Harbor  
Fattic, G. R., Jr.....Niles  
Friedman, Morris E.....New Buffalo  
Garrett, Evan L.....Niles  
Gillette, Clarence H.....Niles  
Green, Robert L.....Eau Claire

Gregory, James.....Berrien Center  
Hanna, P. G.....St. Joseph  
Harper, Ina M.....Benton Harbor  
Harrison, L. L.....Niles  
Hart, Russell T.....Niles  
Helkie, William.....(E) Three Oaks  
Henderson, Fred.....Niles  
Henderson, Robert.....Niles  
Herring, Noel A.....(E) Niles  
Hershey, Noel J.....Niles  
Holt, Robert E., Jr.....Niles  
Howard, Frank W.....Benton Harbor  
Huff, H. D.....Niles  
Johnson, O. V.....Benton Harbor  
Kelsell, H. I.....St. Joseph  
King, B. B.....Benton Harbor  
King, Frank A., Jr.....Benton Harbor  
Kling, H. C.....Niles  
Landgraf, Robert L.....Niles  
Leva, John B.....Benton Harbor  
Louisell, Charles T.....St. Joseph

Miller, E. A.....Berrien Springs  
Mitchell, Carl A.....Benton Harbor  
Moore, T. Scott.....Niles  
Ozeran, Charles J.....Benton Harbor  
Porter, Charles B.....Benton Harbor  
Reagan, Robert.....Benton Harbor  
Rice, Franklin G.....Niles  
Richmond, D. M.....St. Joseph  
Ruth, J. Griswold.....Benton Harbor  
Schairer, Wm. W.....Coloma  
Smith, W. A.....Berrien Springs  
Sowers, Bouton F.....Benton Harbor  
Strick, Marvin H.....Benton Harbor  
Thorup, Don W.....Benton Harbor  
Tompkins, C. E.....Benton Harbor  
Urist, Maurice D.....Benton Harbor  
Westervelt, H. O.....Benton Harbor  
Winter, Joseph A.....St. Joseph  
Woodford, Hackley E.....Benton Harbor  
Yeomans, T. G.....St. Joseph



## ROSTER

### Branch County

Aldrich, Napier S.....Coldwater  
Andrews, Frank A.....Coldwater  
Bailey, J. E.....Coldwater  
Beck, Perry C.....Bronson  
Bien, W. J.....Coldwater  
Culver, Bert W.....Coldwater  
Culver, Dean.....Bronson

Fraser, R. J.....Coldwater  
Johnson, D. B.....Coldwater  
Leitch, R. M.....Union City  
McLain, R. W.....(L) Jackson  
Meier, H. J.....Coldwater  
Mooi, H. R.....Coldwater

Olmstead, Kenneth L.....Coldwater  
Rees, Kendall B.....Coldwater  
Rennell, E. J.....Coldwater  
Thomas, J. A.....Coldwater  
Wade, R. L.....Coldwater  
Walton, N. J.....Quincy  
Weidner, H. R.....Coldwater

### Calhoun County

Albright, Arnold A.....(A) Battle Creek  
Amos, Norman H.....Battle Creek  
Barden, Stuart P.....Battle Creek  
Baribeau, Roy H.....Battle Creek  
Becker, Harry F.....Battle Creek  
Beuker, Herman.....Marshall  
Bodine, Harold R.....Battle Creek  
Bonifer, Philip P.....Battle Creek  
Brainard, C. W.....Battle Creek  
Campbell, Alice F.....Albion  
Campbell, Richard J.....Battle Creek  
Capron, Manley J.....Battle Creek  
Chynoweth, W. R.....Battle Creek  
Cooper, J. E.....Battle Creek  
Curry, Robert K.....Homer  
Diamante, Paul J.....(A) Battle Creek  
Dickson, A. R.....Battle Creek  
Dodge, Warren M., Jr.....Battle Creek  
Fairbanks, Stephen.....Albion  
Finch, D. L.....Battle Creek  
Forsyth, J. F.....Albion  
Fraser, Robert H.....Battle Creek  
Funk, L. D.....Athens  
Gething, Joseph W.....Battle Creek  
Giddings, A. M.....Battle Creek  
Gillfillan, Margery J.....Battle Creek  
Gorsline, Clarence S.....(L) Battle Creek  
Graubner, F. L.....Marshall  
Hansen, E. L.....Battle Creek  
Haughey, Wilfrid.....Battle Creek  
Heald, C. W.....(L) Battle Creek  
Henderson, Philip M.....Albion  
Herzer, Henry A.....(L) Albion  
Hibbs, Donald K.....Battle Creek  
Hills, C. R.....Battle Creek  
Hollands, Robert A.....Battle Creek

Holtom, B. G.....Battle Creek  
Hoyt, Aura A.....Battle Creek  
Hubby, James W.....Battle Creek  
Humphrey, Archie E.....Marshall  
Humphrey, Arthur A.....Battle Creek  
Iseman, Joseph W.....(A) Battle Creek  
Jeffrey, J. R.....Battle Creek  
Jespersion, Lydia.....(L) Battle Creek  
Jones, Aubrey H.....Fort Custer  
Jones, T. K.....Marshall  
Keagle, Leland R.....Battle Creek  
Keeler, K. B.....Albion  
Kelleher, George T.....Battle Creek  
Kimball, A. S., Jr.....Battle Creek  
Kinde, M. R.....Battle Creek  
Kingsley, Paul C.....Battle Creek  
Kolvoord, Theodore.....Battle Creek  
Knapp, Nellie E.....Battle Creek  
Lam, Francis L.....Battle Creek  
Levy, Joseph.....Battle Creek  
Lewis, W. B.....Battle Creek  
Linn, Frank D.....Albion  
Love, James M.....Battle Creek  
Lowe, Kenneth H.....Battle Creek  
Lowe, Stanley T.....Battle Creek  
MacGregor, Archibald E. (L) Battle Creek  
Manni, Lawrence.....Battle Creek  
Meister, F. O.....Battle Creek  
Melges, Fred J.....Battle Creek  
Mercer, C. M.....Battle Creek  
Moody, Joseph E.....Battle Creek  
Morrison, Donald B.....Battle Creek  
Moshier, Bertha.....(R) Battle Creek  
Mullenmeister, Hugh F.....Battle Creek  
Mustard, Russell L.....Battle Creek  
Patrick, Gilbert T.....Battle Creek

Pearson, Donald J.....Battle Creek  
Putnam, Willard N.....Battle Creek  
Robbert, John.....Battle Creek  
Robins, Hugh.....Marshall  
Rorich, Wilma Weeks.....Battle Creek  
Rosenfeld, J. E.....Battle Creek  
Rowan, Russell C.....Albion  
Royer, Clark W.....Battle Creek  
Schaeffer, Joseph N.....(A) Battle Creek  
Schelm, George W.....Battle Creek  
Schwarz, Frank W.....Battle Creek  
Sharp, A. D.....Albion  
Shipp, Leland P.....Battle Creek  
Shellenberger, Herbert M.....Marshall  
Siblsky, A. Clark.....Battle Creek  
Simpson, Robert S.....Battle Creek  
Slagle, George W.....Battle Creek  
Sleight, James D.....Battle Creek  
Stadle, Wendell H.....Battle Creek  
Stiefel, Richard A.....Battle Creek  
Strohenger, Frank J.....Albion  
Tannenholz, Harold S.....Battle Creek  
Taylor, Clifford B.....Albion  
Upson, W. O.....(L) Oceanside, Calif.  
VanderVoort, Wm. V.....Battle Creek  
Verity, Lloyd E.....Battle Creek  
Walker, Charles S.....Battle Creek  
Walters, Frank R.....Battle Creek  
Walters, John F.....Battle Creek  
Wencke, Carl G.....Battle Creek  
Wilkinson, Charles F.....Battle Creek  
Winslow, Sherwood B.....Battle Creek  
Worgess, Duane R.....Battle Creek  
Young, John E.....(A) Battle Creek  
Zindler, George A.....Battle Creek

### Cass County

Adams, Uriah M.....Marcellus  
Britton, George T.....Marcellus  
Clary, Rudolph I.....Dowagiac

Hickman, John H.....Dowagiac  
Kelsey, James H.....Cassopolis  
Loupee, George E.....Dowagiac  
Loupee, S. L.....Dowagiac

Newsome, Otis E.....Cassopolis  
Pierce, Kenneth C.....Dowagiac  
Zwergel, E. H.....Cassopolis

### Chippewa-Mackinaw Counties

Bandy, Festus C.....Sault Ste. Marie  
Blain, James G.....Sault Ste. Marie  
Blair, Herbert M.....Sault Ste. Marie  
Cowan, Donald.....Sault Ste. Marie  
Finlayson, Donald D.....Sault Ste. Marie  
Gillfillan, Edwin O.....Sault Ste. Marie  
Goldberg, A. H.....Sault Ste. Marie  
Hagele, Marie A.....Sault Ste. Marie

Hamel, Herbert E.....St. Ignace  
Harrington, H. M.....Sault Ste. Marie  
Howe, Donnell C.....Sault Ste. Marie  
Howe, Gertrude E.....Sault Ste. Marie  
Mackie, Thomas B.....Sault Ste. Marie  
McBryde, Lyman M.....Sault Ste. Marie  
Mertaugh, William F.....Sault Ste. Marie  
Montgomery, B. T.....Sault Ste. Marie

Rhind, Earl S.....Sault Ste. Marie  
Scott, Dwight F.....Sault Ste. Marie  
Thompson, T. W.....Sault Ste. Marie  
Trapasso, Tony J.....Sault Ste. Marie  
Venier, A. G.....Sault Ste. Marie  
Wallen, LeRoy J.....Sault Ste. Marie  
Willison, C.....(E) Sault Ste. Marie  
Yale, I. Victor.....Sault Ste. Marie

### Clinton County

Cook, Bruno.....Westphalia  
Daurelle, G. P., Jr.....Fowler  
Elliott, Bruce R.....Ovid

Foo, Charles T.....St. Johns  
Frace, Guy H.....St. Johns  
Luton, F. E.....St. Johns  
McWilliams, W. B.....Maple Rapids

Russell, Sherwood.....St. Johns  
Stoller, Paul F.....St. Johns  
Wahl, George E.....St. Johns

### Delta-Schoolcraft Counties

Benson, Gilbert W.....Escanaba  
Bernier, A. Barro.....Nahma  
Boyce, Donald H.....Escanaba  
Brenner, Ervin J.....Manistique  
Carlton, Arthur J.....Escanaba  
Chenoweth, Nancy R.....Escanaba  
Dehlin, James R.....(E) Ontario, Canada  
Gladstone

Frenn, Nathan J.....Bark River  
Fyvie, James H.....Manistique  
Groos, Harold Q.....Escanaba  
Groos, Louis P.....Escanaba  
Harrison, W. C.....Escanaba  
Hult, Otto S.....Gladstone  
Kee, Charles E.....Gladstone  
Lemire, Donald F.....Escanaba

Lemire, Wm. A.....Escanaba  
Lindquist, N. L.....Escanaba  
McInerney, Thomas A.....Escanaba  
Miller, Albert H.....Gladstone  
Moll, Gustavus W.....(E) Escanaba  
Ryde, R. E.....Gladstone  
Walch, John J.....Escanaba  
Wehner, Merle E.....Manistique

### Dickinson-Iron Counties

Addison, E. R.....Crystal Falls  
Alexander, W. H.....Iron Mountain  
Boyce, George H.....Iron Mountain  
Browning, James L.....Iron Mountain  
Cooper, Charles A.....Stambaugh  
Fiedling, William.....Norway

Frederickson, Geron.....Iron Mountain  
Hayes, Willard N.....Norway  
Huron, Willis H.....Iron Mountain  
Irvine, Lionel E.....Iron River  
Kofmehl, Wm. J.....Stambaugh

McEachran, Hugh D.....Iron Mountain  
Menzie, Clifford.....Iron Mountain  
Palm, E. Theodore.....Crystal Falls  
Retallack, R. C.....Iron River  
Smith, Donald R.....Iron Mountain  
Steinke, Charles G.....Iron Mountain

# ROSTER

## Eaton County

Brown, Byron P.....Charlotte  
Carothers, Daniel J.....Charlotte  
DeLand, C. L.....Olivet  
Engle, Paul.....Olivet  
Hannah, Harry W.....Charlotte

Harrod, Gordon R.....Grand Ledge  
Imthun, Edgar F.....Grand Ledge  
Meinke, Albert H., Jr.....Eaton Rapids  
Myers, Albert W.....Pottersville

Sevener, Lester G.....Charlotte  
Stucky G. C.....Charlotte  
Van Ark, Bert.....Eaton Rapids  
Van Ark, Herman F.....Eaton Rapids  
Whitlock, Stanley C.....Dimondale

## Genesee County

Adams, Burnell.....Flint  
Adams, Chester H.....Bayside, L. I., N. Y.  
Anderson, Harley H.....Mt. Morris  
Andrews, Nelson A. C.....Flushing  
Anthony, George E.....Flint  
Backus, Glenn R.....Flint  
Baird, Winston C.....Flint  
Bald, Frederick W.....Flint  
Barbour, Fleming A.....Flint  
Baske, Franklin W.....Flint  
Bateman, L. C.....Flint  
Benson, John C., Jr.....Flint  
Benson, J. C., Sr.....(L) Flint  
Bernstein, Eli N.....Flint  
Beyer, Damon P.....Clio  
Beyer, George D.....Clio  
Biggar, H. R.....Flint  
Bishop, D. L.....Flint  
Blakeley, Arthur C.....Flint  
Bogart, Leon M.....Flint  
Boles, William P.....Flint  
Bonathan, Alvin T.....Flint  
Bradley, Robert M.....Flint  
Brain, R. Gordon.....Flint  
Branch, Hira E.....Flint  
Brasie, Donald R.....Flint  
Briggs, Guy D.....Flint  
Brooks, A. L.....Flint  
Bruce, William W.....Swartz Creek  
Buchanan, W. Fremont.....Fenton  
Burkett, L. V.....Flint  
Burnell, Max.....Flint  
Caster, E. Wilbur.....Huntington Woods  
Chambers, Myrton S.....Flint  
Chandler, M. E.....(L) Flint  
Charters, John H.....(E) Flint  
Clark, Clifford P.....Flint  
Colwell, C. W.....Flint  
Connell, John T.....Flint  
Conover, George V.....Flint  
Conover, McClellan.....Flint  
Conover, T. Sidney.....Flint  
Cook, Henry.....Flint  
Covert, Floyd L.....Gaines  
Crane, Harley C.....Flint  
Credille, Barney A.....Flint  
Curry, George J.....Flint  
Curtin, John H.....Flint  
Del Zingro, N.....Davison  
Denholm, Nan H.....Flint  
Dickstein, Bernard.....Flint  
Dimond, Edwin G.....Flint  
Dodds, Frederick E.....Flint  
Eichhorn, Ernest M.....Flint  
Eickhorst, Thomas.....Flint  
Elliott, Hardie B.....Flint  
Ettinger, Ralph D.....Fenton  
Farhat, Maynard M.....Flint  
Fee, G. Manson.....Flint  
Finkelstein, Theodore.....Flint  
Flynn, Southard T.....Flint  
Foley, Sydney I.....Flint  
Fuller, Harvey T.....Mt. Morris

Gelenger, Stephen M.....Flint  
Gleason, N. A.....Flint  
Golden, H. Maxwell.....Flint  
Goodfellow, B. A.....(L) Flint  
Gorne, Saul S.....Flint  
Griffin, Ernest P., Jr.....Flint  
Grover, H. F.....Flint  
Guile, Earl B.....(L) Flint  
Guile, Gurdon S.....Flint  
Gundry, George L.....Grand Blanc  
Gutow, Isadore.....Flint  
Gutow, J. J.....Flint  
Hague, Robert F.....Flint  
Halligan, Raymond S.....Flint  
Hamady, Ruth.....Flint  
Hamilton, A. J.....Flint  
Harper, Alex W.....(L) Flint  
Harper, Homer.....Flint  
Hawkins, James E.....Flint  
Hays, George A.....Flint  
Hiscock, Harold H.....Flint  
Hooper, Kendall.....Flint  
Houston, James.....(L) Swartz Creek  
Hubbard, Wm. B.....Flint  
Hufton, Wilfred L.....Flint  
Jermstad, Robert J.....Flint  
Johnson, Arthur H.....Flint  
Johnson, Frank D.....Flint  
Jones, Lafon.....Flint  
Judd, Alvin.....Flint  
Kaleta, Edward.....Flint  
Kaufman, L. D.....Flint  
Knapp, William D.....Flint  
Kretschmar, Arthur H.....Flint  
Kurtz, John J.....Flint  
Leach, J. Leonidas.....Flint  
Limbach, David R.....Flint  
Livesay, Jackson E.....Flint  
Logan, George W.....(L) Flushing  
MacDuff, R. Bruce.....Flint  
MacGregor, Delbert M.....Flint  
Macksood, Joseph A.....Flint  
Marsh, H. LaRue.....Flint  
McArthur, Arthur.....Flint  
McGarry, Roy A.....Flint  
McKenna, Oscar W.....(E) Flint  
McLeod, Kenneth W. A.....Flint  
Miller, Loren Eugene.....Flint  
Miltich, Anthony J.....Flint  
Moore, Kenneth B.....Flint  
Moore, Wesley P.....Flint  
Morrish, Ray S.....Flint  
Morrison, William H.....Grand Blanc  
Morrissey, V. H.....Flint  
Mosier, Edward C.....Otisville  
Odle, Ira D.....Flint  
O'Neil, C. H.....(R) Deckerville  
Orr, John Walter.....Flint  
Phillips, Robert L.....Flint  
Pfeifer, A. C.....Mt. Morris  
Pratz, Oliver C.....Flint  
Preston, Otto.....Flint

Ragan, Russell E.....Flint  
Randall, Herbert E.....(E) Flint  
Rawlings, J. Mott.....Flint  
Reeder, Frank E.....Flint  
Reichard, Orill.....(L) Flint  
Reid, Wells C.....Goodrich  
Richeson, Vern N.....Flint  
Rieth, George F.....Flint  
Roberts, Floyd A.....Flint  
Rulney, Max.....Flint  
Rundles, Walter Z.....Flint  
Rynearson, William J.....Fenton  
Sandy, Kenneth R.....Flint  
Scavarda, Charles J.....Flint  
Schiff, B. A.....Flint  
Schreiber, E. Oskar.....Flint  
Scott, Robert D.....Flint  
Searles, Karl F.....Flint  
Shantz, Leighton O.....Flint  
Sheeran, Daniel H.....Flint  
Shipman, Charles W.....Flint  
Sirna, Anthony R.....Flint  
Sleeman, Blythe R.....Linden  
Smith, DeVerne C.....Flint  
Smith, Eugene C.....Flint  
Smith, Maurice J.....Flint  
Sniderman, Benjamin F.....Flint  
Snyder, Charles E.....Swartz Creek  
Sorkin, Morris L.....Flint  
Sorkin, Samuel S.....Flint  
Sparks, Harvey V.....Flint  
Steffe, Ralph S.....Flint  
Steinman, Floyd H.....Flint  
Stephenson, Robert A.....Flint  
Stevenson, William W.....Flint  
Streat, Rudolph W.....Flint  
Stroup, Clayton K.....Flint  
Sutherland, James K.....Flint  
Sutton, George.....Flint  
Thompson, Alvin.....Flint  
Tofteland, Elmer H.....Flint  
Treat, David L.....(L) Flint  
Trumble, George W.....Flint  
Turner, Merald G.....Flint  
VanGorder, George F.....Davison  
Van Harn, R. S.....Flint  
Vary, Edwin P.....Flint  
Walcott, Carver G.....Fenton  
Ward, Nell M.....Flint  
Ware, Frank.....Flint  
Wark, David R.....Flint  
Wentworth, John E.....Flint  
Werness, Inga W.....Flint  
White, Carl H.....Fenton  
White, Herbert T.....Flint  
Williams, William S.....Flint  
Willoughby, Gordon L.....Flint  
Willoughby, Leslie L.....(L) Flint  
Wills, Thomas N.....Flint  
Winchester, Walter H.....(L) Flint  
Woughter, Harold W.....Flint  
Wright, Donald W.....Flint  
Wyman, J. S.....Grand Blanc

## Gogebic County

Albert, Samuel G.....Ironwood  
Davidson, Donald L.....Bessemer  
Eisele, David C.....Ironwood  
Franch, John R.....Wakefield  
Gertz, Michael A.....Ironwood  
Gingrich, Wayne A.....Ironwood

Gorilla, Allen C.....Ironwood  
Lieberthal, Maurice J.....Ironwood  
Lieberthal, Paul R.....Ironwood  
Lojacono, Salvatore.....Ironwood  
Maccani, Wm. L.....Ironwood  
Nezworski, Henry T.....Ironwood

O'Brien, A. J.....Ironwood  
Pinkerton, Harold.....Ironwood  
Stevens, Charles E.....Ironwood  
Tressel, Henry A.....Wakefield  
Urquhart, C. C.....Ironwood  
Wacek, William H.....Ironwood

## Grand Traverse-Leelanau-Benzie Counties

Beall, John G.....Traverse City  
Bolam, Ellis J.....Suttons Bay  
Brownson, Jay J.....Kingsley  
Brownson, Kneale M.....Traverse City  
Bushong, Benjamin B.....Traverse City  
Ellis, Claude I.....Suttons Bay  
Evseff, George S.....Traverse City  
Fannaff, Frederick L.....Elk Rapids  
Gauntlett, J. W.....(L) Traverse City  
Goodrich, Dwight.....Traverse City  
Hall, James W.....Traverse City  
Hamilton, Earl E.....Traverse City  
Huene, Nevin.....Traverse City

Huston, Russell R.....Elk Rapids  
Hyslop, Wm. T.....Traverse City  
Jerome, Jerome T.....Traverse City  
Kyselka, Harry.....Traverse City  
Lemen, Charles E.....Traverse City  
Lossman, Robert T.....Detroit  
Meng, Ralph H.....Traverse City  
Merritt, Harry.....Traverse City  
Nickels, M. M.....Traverse City  
Osterhagen, Harold F.....Traverse City  
Osterlin, Mark.....Traverse City  
Pike, Donald.....Traverse City  
Power, Frank H.....Traverse City

Salon, Dayton D.....Traverse City  
Sheets, R. Phillip.....Traverse City  
Sladek, E. F.....Traverse City  
Swartz, Fred G.....Traverse City  
Thirby, Edwin L.....Traverse City  
VanLeuven, B. H.....Traverse City  
Way, Lewis R.....Traverse City  
Whitehouse, John D.....Traverse City  
Wilhelm, E. C.....Traverse City  
Willoughby, Frances Lois.....Washington, D. C.  
Zielke, I. H.....Traverse City  
Zimmerman, Joseph G.....Traverse City



# ROSTER

## Gratiot-Isabella-Clare Counties

Aldrich, Alfred L.....Ithaca  
Baltz, F. F.....Mt. Pleasant  
Barstow, Don K.....St. Louis  
Barstow, W. E.....St. Louis  
Baskerville, C. M.....(E) Mt. Pleasant  
Becker, M. G.....Edmore  
Bergin, Joseph H.....Alma  
Budge, M. J.....Ithaca  
Burch, L. J.....(E) Mt. Pleasant  
Burt, C. E.....Ithaca  
Burt, Loren G.....Alma  
Davis, Lionel L.....Mt. Pleasant

Del Giorno, Thomas.....Shepard  
Drake, Wilkie M.....Breckenridge  
DuBois, C. F.....Alma  
Graham, B. J.....Alma  
Hall, R. F.....Mt. Pleasant  
Hammerberg, Kuno.....Clare  
Harrigan, W. L.....Mt. Pleasant  
Hersee, Wm. E.....Mt. Pleasant  
Hobbs, A. D.....St. Louis  
Hyslop, Leland F.....Mt. Pleasant  
Johnson, P. R.....Mt. Pleasant  
Juhnke, L. W.....Mt. Pleasant  
McArthur, Stewart C.....Clare

Miller, S. W.....Alma  
Oldham, E. S.....Breckenridge  
Putzig, Louis M.....Blanchard  
Rottschaffer, J. L.....Alma  
Silvert, Pasche P.....Vestaburg  
Strange, Russell H.....Mt. Pleasant  
Waggoner, R. L.....St. Louis  
Wickert, L. R.....Mt. Pleasant  
Wilcox, Rex A.....Alma  
Wilson, Earl C.....Harrison  
Wolfe, Kenneth P.....Alma  
Wood, Cornelius B.....Mt. Pleasant

## Hillsdale County

Bates, Morton P.....Hillsdale  
Davis, L. A.....Camden  
Day, Luther W.....Jonesville  
Douglas, E. W.....Hillsdale  
Green, Burt F.....Hillsdale  
Hanke, George R.....Osseo  
Hodge, C. L.....Reading

Hughes, Henry F.....(L) Hillsdale  
Kline, Fred D.....Litchfield  
MacNeal, John.....Hillsdale  
Martindale, E. A.....(L) Hillsdale  
Mattson, H. F.....Hillsdale  
Miller, Harry C.....(L) San Diego, Calif.

Moench, George F.....Oak Ridge, Tenn.  
Peterson, Carl A.....Hillsdale  
Sawyer, Walter W.....Hillsdale  
Stein, Arthur.....Hillsdale  
Strom, Arthur W.....Hillsdale  
Trapp, Donald.....Hillsdale  
Wiggins, Ira W.....Jonesville

## Houghton-Baraga-Keeweenaw Counties

Aldrich, Addison B.....Houghton  
Aldrich, Addison D.....Houghton  
Aldrich, Leonard C.....Houghton  
Bourland, Phillip D.....(L) Calumet  
Brewington, G. F.....(E) Mohawk  
Burke, John J.....Hubbell  
Conrad, George B.....Houghton  
Glegg, W. T. S.....(E) Cambridge, Mass.  
Hillmer, Raymond E.....Painesdale  
Hosking, Frederick S.....Laurium

Janis, Anton J.....Houghton  
King, William T.....Ahmeek  
Kirton, Job R. W.....(E) Calumet  
Kolb, Frederick E.....Calumet  
LaBine, Alfred.....Houghton  
Levin, Simon.....Houghton  
McQueen, Donald K.....(E) Laurium  
Manthei, W. A.....Lake Linden  
Murphy, Percy J.....Ahmeek  
Quick, James B.....(L) Laurium  
Roberts, Melvin D.....Hancock

Roche, Andrew M.....Laurium  
Sarvela, Herman L.....Hancock  
Scott, Benton V. D.....Chassell  
Sloan, Paul S.....Houghton  
Smith, Charles R.....Hancock  
Stahr, Harry S.....Modesta, Calif.  
Stern, Isadore.....Houghton  
Whitmore, Ray C.....Hancock  
Wickliffe, John T. P.....Calumet  
Winkler, Henry J.....L'Anse

## Huron County

Bentley, M. D.....Sebewaing  
Dixon, Ralph C.....Pigeon  
Herrington, Charles.....Bad Axe  
Herrington, Willet J.....Bad Axe  
Libke, Robert.....Uby

Monroe, Duncan J.....(L) Elkton  
Oakes, C. W.....Harbor Beach  
Ritsema, John.....Sebewaing  
Scheurer, Clare A.....Pigeon

Sorensen, Maurice G.....Kinde  
Staryk, Steven E.....Kinde  
Steinhardt, Edward E.....Elkton  
Thumme, Harris F.....Sebewaing  
Turner, Phillip R.....Harbor Beach

## Ingham County

Alexander, Reuben G.....Lansing  
Altland, J. K.....Lansing  
Badgley, W. O.....Lansing  
Bartholomew, Henry S.....(R) Harbor Beach  
Bauer, Theodore I.....Lansing  
Behen, William C.....Lansing  
Bellinger, E. G.....Lansing  
Berghorst, John.....Lansing  
Black, Charles E.....Williamston  
Black, Gertrude.....Williamston  
Bobczynski, W. E.....East Lansing  
Bradford, C. W.....Lansing  
Breakney, Robert S.....Lansing  
Briede, Paul C.....Lansing  
Brown, Fred Jr.....Lansing  
Brubaker, Earl.....Lansing  
Brucker, Karl B.....Lansing  
Burhans, R. A.....Lansing  
Calomeni, Anthony D.....Lansing  
Cameron, W. J.....Lansing  
Carr, Earl I.....Lansing  
Christian, L. G.....Lansing  
Clark, William E.....Mason  
Clarke, Emilie A.....Lansing  
Clinton, George.....Mason  
Cook, R. J.....Lansing  
Cope, H. E.....Lansing  
Corneliuson, Goldie B.....Lansing  
Corsaut, J. C.....Altedena, Calif.  
Cowan, John A.....Charlotte  
Cross, Frank S.....Lansing  
Cummings, G. D.....Lansing  
Darling, L. H.....Lansing  
Dean, Carleton.....Lansing  
De Kleine, William.....Lansing  
DeVries, C. F.....Lansing  
Doyle, C. P.....(E) Lansing  
Drolett, Donald J.....Lansing  
Drolett, Fred.....Lansing  
Drolett, Lawrence.....Lansing  
Dunn, F. C.....(L) Lansing  
Dunn, F. M.....Lansing  
Ellis, Bertha.....West Olive  
Ellis, C. W.....West Olive  
Feeney, Kenneth J.....Lansing  
Folkers, Leonard M.....East Lansing  
Fortino, S. P.....Lansing  
Fosget, Wilbur W.....Lansing  
Foust, E. H.....Lansing  
French, Horace L.....Lansing  
Gardner, C. B.....Lansing  
Goldner, Roy E.....Lansing  
Gould, Marian Iddings.....Lansing  
Hackman, Pearl.....Lansing

Harris, Herbert W.....Lansing  
Harrison, W. H.....Lansing  
Harrold, J. F.....Lansing  
Hart, L. C.....Lansing  
Hayford, W. D.....Lansing  
Heald, Gordon H.....East Lansing  
Heckert, Frank.....Lansing  
Heckert, J. K.....Lansing  
Henry, L. L.....Lansing  
Heustis, Albert E.....Lansing  
Himmelberger, R. J.....Lansing  
Hodges, Kenneth P.....Lansing  
Holland, Charles F.....East Lansing  
Huggett, Clare C.....Lansing  
Huntley, Fred M.....Lansing  
Hurth, M. S.....Lansing  
Isbister, John L.....Lansing  
Jacob, S. Sprigg.....East Lansing  
Johnson, Kenneth H.....Lansing  
Jones, Francis Jr.....Lansing  
Kahn, David.....Lansing  
Kalmbach, R. E.....Lansing  
Keim, Cameron.....Lansing  
Kent, Edith Hall.....Lansing  
Kent, Herbert K.....Lansing  
Kenyon, Fanny H.....Lansing  
Klunzinger, Willard R.....Lansing  
Kraft, L. C.....Leslie  
Lanting, Helen E.....East Lansing  
Lanting, Roelof.....Lansing  
LeDuc, Don M.....Lansing  
Loree, Maurice C.....Lansing  
Lucas, T. H.....Lansing  
Ludlum, L. C.....Lansing  
Markuson, Kenneth E.....Lansing  
Martin, Wayne.....Lansing  
McConnell, E. G.....(R) Lansing  
McCorvie, C. Ray.....East Lansing  
McCoy, Earl M.....Grand Ledge  
McCrumb, R. R.....Lansing  
McElmurry, Leland R.....Lansing  
McGillicuddy, Oliver B.....Lansing  
McGillicuddy, R. J.....Lansing  
McIntyre, J. E.....Lansing  
McNamara, B. E.....Lansing  
McNamara, William E.....Lansing  
Meade, Robert.....Lansing  
Meade, William H.....Lansing  
Mercer, W. E.....East Lansing  
Monfort, Robert.....East Lansing  
Morrow, R. J.....Lansing  
Ochsner, P. J.....Lansing  
O'Sullivan, Gertrude.....(E) Mason  
Parker, Earl E.....Leslie  
Pinkham, R. A.....Lansing  
Place, Edwin H.....Lansing

Ponton, Joseph C.....Mason  
Potter, Earl C.....Lansing  
Prall, H. J.....Lansing  
Randall, O. M.....Lansing  
Rector, Frank L.....Ann Arbor  
Reed, O. Grant.....East Lansing  
Reynolds, E. E.....Williamston  
Richards, F. D.....Dewitt  
Richardson, M. L.....Lansing  
Robson, Edmund J.....Lansing  
Rozan, J. S.....Lansing  
Rozan, M. M.....Lansing  
Ruhmkorff, R. H.....East Lansing  
Russell, Claude V.....(R) Lansing  
Sander, John F.....East Lansing  
Scheidt, R. Rudolph.....Lansing  
Schoff, Charles.....Williamston  
Schultz, Arthur E.....East Lansing  
Seeger, Fred.....(L) St. Petersburg, Fla.  
Sharp, Mahlon.....Lansing  
Shaw, Milton.....Lansing  
Sherman, G. A.....Lansing  
Sichler, Harper G.....Lansing  
Silverman, Irving E.....Lansing  
Smith, Anthony V.....Mason  
Smith, H. M.....Lansing  
Snell, D. M.....Lansing  
Snyder, LeMoyn.....Lansing  
Snyder, Ruth E.....East Lansing  
Spagnuolo, A. J.....Lansing  
Spencer, Perry.....Lansing  
Stanka, Andrew G.....Grand Ledge  
Stanley, Arthur L.....East Lansing  
Steiner, A. A.....Lansing  
Steiner, S. D.....Lansing  
Stiles, Frank.....Lansing  
Strauss, P. C.....Lansing  
Stringer, C. J.....Lansing  
Swartz, F. C.....Lansing  
Tamblyn, F. W.....Lansing  
Toothaker, K. W.....Lansing  
Towne, Lawrence C.....Lansing  
Trescott, Robert F.....Lansing  
Trimby, Robert H.....Lansing  
Troost, F. L.....Holt  
VanderZalm, T. P.....Lansing  
Venier, Joseph.....Lansing  
Wadley, Ralph.....Lansing  
Walker, Leo W.....Lansing  
Webb, Roy O.....Okemos  
Wellman, John.....Lansing  
Wilensky, Thomas.....Lansing  
Wiley, Harold W.....Lansing  
Willson, Howard S.....Lansing  
Wilson, Harry A.....Lansing



# ROSTER

## Ionia-Montcalm Counties

Anderson, Donald H.....Portland  
Bird, Wm. L.....Greenville  
Bracey, L. E.....(L) Sheridan  
Bunce, E. P.....Trufant  
Bunce, Leo W.....Trufant  
Cox, T. Jefferson.....Ionia  
Dunkin, Lloyd S.....Greenville  
Fleming, J. C.....Pewamo  
Fox, Harold M.....Portland  
Freiswyk, Melvin J.....Belding  
Geib, O. P.....Carson City  
Glerum, John B.....Greenville

Hansen, Carl M.....Stanton  
Hansen, M. M.....Greenville  
Hoffs, M. A.....Lake Odessa  
Holland, A. E.....Belding  
House, Glenn W.....Greenville  
Kelsey, L. E.....Lakeview  
Kopchick, Joseph.....Muir  
Lilly, Isaac S.....Stanton  
Marston, L. L.....Lakeview  
McCann, John J.....Ionia  
Michmerhuizen, Robert E.....Lake Odessa  
Pankhurst, Charles T.....Ionia  
Peabody, C. H.....(L) Lake Odessa

Reid, Harold E.....Stanton  
Rice, Robert E.....Greenville  
Robertson, Perry C.....Ionia  
Seidel, Karl E.....Ionia  
Slade, H. G.....Ionia  
Slaght, Milton E.....Saranac  
Snider, J. D.....Ionia  
Socha, Edmund S.....Ionia  
Swift, E. R.....(L) Lakeview  
Tannheimer, John.....Ionia  
VanLoo, J. A.....Belding  
Weaver, Harry B.....Greenville

## Jackson County

Adams, Dewitt C.....Caro  
Adams, Ellis W.....Jackson  
Ahronheim, J. H.....Jackson  
Alter, R. H.....Jackson  
Anderson, W. B.....Jackson  
Appel, Saul.....Jackson  
Baker, George M.....Parma  
Bartholic, Frank W.....Homer  
Beckwith, Sidney A.....Stockbridge  
Bindshedler, Buell S.....Jackson  
Brashares, Z. A.....Brooklyn  
Bullen, G. Rex.....Jackson  
Chabut, Hector M.....Jackson  
Clarke, Corwin S.....Jackson  
Cochrane, Wayne A.....(L) Jackson  
Cooley, Charles W.....Jackson  
Cooley, Randall M.....Jackson  
Corley, Cecil.....Jackson  
Corley, Ennis H.....Jackson  
Cox, Ferdinand.....Jackson  
Culver, Guy D.....Stockbridge  
DeMay, Cuthbert E.....Jackson  
DeMay, John D.....Jackson  
Deming, Richard C.....Jackson  
Dengler, Charles R.....Jackson  
Durocher, Normand E.....Jackson  
Edmonds, John M.....Horton  
Enders, W. H.....Jackson  
Filip, H. K.....Jackson  
Finch, Russell.....Jackson  
Finton, Robert E.....Jackson  
Finton, Walter L.....Jackson  
Foust, W. L.....Grass Lake  
Gibson, Frank J.....(L) Jackson  
Greenbaum, Harry.....Jackson  
Growt, Bowers H.....Addison  
Habenicht, Hilda.....Jackson

Hackett, Thomas E.....Jackson  
Hackett, Thomas L.....Jackson  
Hanft, Cyril F.....Springport  
Hanna, Roger J.....Jackson  
Hardie, George C.....Jackson  
Harris, Lester J.....(E) Jackson  
Hay, H. S.....Jackson  
Hicks, Glenn C.....Jackson  
Holst, John B.....Jackson  
Holstein, Arthur P.....Manchester  
Huebner, R. J.....Addison  
Huntley, W. B.....Hudson  
Keefer, A. H.....Concord  
Kudner, Don F.....Jackson  
Lake, Edward.....Jackson  
Landron, Daniel.....Michigan Center  
Leahy, Edward O.....Jackson  
Lenz, Charles R.....Jackson  
Leonard, Clyde A.....Jackson  
Lewis, E. F.....Jackson  
Linden, V. E.....Jackson  
Ludwick, John E.....Jackson  
McGarvey, William E.....Jackson  
McLaughlin, M. J.....Jackson  
McLaughlin, Herbert B.....Jackson  
Meads, Jason B.....Jackson  
Miller, Jack L.....Jackson  
Miller, Samuel L.....Jackson  
Munnell, Edward R. (A).....Detroit  
Munro, Colin D.....(E) Jackson  
Munro, James E.....Jackson  
Munro, Nathan D.....Jackson  
Murphy, Bernard M.....Jackson  
Newton, Ray E.....Jackson  
Oleksy, Stanley P.....Jackson  
O'Meara, James J.....Jackson  
Otis, Grant L.....Jackson  
Payne, Andrew K.....Jackson

Phillips, George H.....Jackson  
Porter, Horace W.....Jackson  
Pray, Frank F.....Jackson  
Pray, G. R.....(L) Jackson  
Ransom, F. G.....Jackson  
Rice, John W.....Jackson  
Riley, Philip A.....Jackson  
Sargent, Leland E.....Jackson  
Sautter, W. A.....Horton  
Schmidt, T. E.....Jackson  
Scott, John A.....Jackson  
Shaeffer, Arthur M.....Jackson  
Sill, Henry W.....Jackson  
Sirhal, Alfred M.....Brooklyn  
Smith, Dean W.....Jackson  
Southwick, W. A.....Springport  
Stewart, L. L.....Jackson  
Stone, Ethon L.....Jackson  
Sugar, Samuel.....Jackson  
Susskind, Myron V.....Jackson  
Tate, Cecil E.....Jackson  
Taylor, Ross V.....Jackson  
Thayer, E. A.....Jackson  
Thalner, L. F.....Jackson  
Thompson, John R.....Manchester  
Thompson, Tom.....Jackson  
Torwick, E. T.....Jackson  
Townsend, J. W.....Jackson  
Van Schoick, Frank.....Jackson  
VanSchoick, John D.....Hanover  
Van Wagnen, Frederick I.....Jackson  
Vivirski, Edward E.....Jackson  
Wallace, Warren S.....Jackson  
Wholihan, John W.....Jackson  
Wickham, Woodward A.....Jackson  
Wilson, Norman D.....(L) Jackson  
Winter, George E.....(E) Jackson

## Kalamazoo County

Aach, Hugo.....Kalamazoo  
Alexander, C. A.....Kalamazoo  
Andersen, Glenn C.....Kalamazoo  
Anderson, K. A.....Wichita Falls, Texas  
Andrews, Sherman E.....Kalamazoo  
Armstrong, Robert J.....Kalamazoo  
Banner, Lawrence R.....Kalamazoo  
Barak, Herbert G.....Kalamazoo  
Barnabee, James W.....(L) Kalamazoo  
Barrow, Winona M.....Oshtemo  
Behan, Gerald W.....Galesburg  
Benjamin, Margaret H.....Kalamazoo  
Bennett, Charles L.....Kalamazoo  
Bennett, Keith F.....Kalamazoo  
Berry, Jerome F.....Kalamazoo  
Birch, William G.....Kalamazoo  
Bodmer, Harvey C.....Kalamazoo  
Borgman, Wallace.....Kalamazoo  
Bos, Charles E.....Kalamazoo  
Brown, Irmel W.....Kalamazoo  
Burbidge, Earl L.....Kalamazoo  
Chrest, Clarence.....Kalamazoo  
Cobb, Horace R.....Kalamazoo  
Conrad, Maynard M.....Kalamazoo  
Cook, Ralph.....Kalamazoo  
Cooper, Paul F.....Kalamazoo  
Crane, Warren B.....Kalamazoo  
Crawford, Kenneth L.....Kalamazoo  
Dahlstrom, Doris E.....Kalamazoo  
Dana, Robert L.....Kalamazoo  
DeGroat, Albert.....Kalamazoo  
Delbert, Stewart G.....Kalamazoo  
DePree, Harold.....Kalamazoo  
DeWitt, L. H.....(R) Kalamazoo  
DeWitt, Norman L.....Kalamazoo  
Dowd, B. J.....Kalamazoo  
Doyle, Frederick M.....Kalamazoo  
Estill, Don V.....Kalamazoo  
Fast, R. B.....Kalamazoo  
Fath, August F.....Kalamazoo  
Fopeano, John V.....Kalamazoo  
Fulkerson, C. B.....(L) Kalamazoo  
Fuller, Paul M.....Kalamazoo  
Gerstner, Louis W.....Kalamazoo  
Gilding, Joseph P.....Vicksburg

Goodhue, Lolita.....Kalamazoo  
Grant, Frederick E.....(E) Kalamazoo  
Green, William L.....Kalamazoo  
Gregg, U. Sherman.....Kalamazoo  
Hayner, Russell A.....Kalamazoo  
Heersma, H. Sidney.....Kalamazoo  
Hildreth, Ross C.....Kalamazoo  
Hodgman, Albert B.....Kalamazoo  
Hoebcke, William G.....Kalamazoo  
Holder, Charles O.....Kalamazoo  
Howard, Harry S.....Kalamazoo  
Howard, R. Grant.....Kalamazoo  
Howard, Willard H.....Galesburg  
Hubbell, Reader J.....Kalamazoo  
Huysler, William C.....Kalamazoo  
Irwin, William D.....Kalamazoo  
Jackson, Howard C.....Kalamazoo  
Jackson, J. B.....(L) Kalamazoo  
Jennings, Wesley O.....Kalamazoo  
Kavanaugh, Wm. R.....Kalamazoo  
Kilgore, Robert N.....Kalamazoo  
Klerk, William J.....Kalamazoo  
Koestner, Paul A.....Kalamazoo  
Lambert, Rudolph H.....Kalamazoo  
Lavender, Howard C.....Kalamazoo  
Lawrence, James.....Kalamazoo  
Light, Richard U.....Kalamazoo  
Light, S. Rudolph.....Kalamazoo  
Littig, John D.....Kalamazoo  
MacGregor, John R.....Kalamazoo  
Machin, Harold A.....Kalamazoo  
MacNeill, Roy A.....Kalamazoo  
Malone, James G.....Kalamazoo  
Margolis, Frederick J.....Kalamazoo  
Marshall, Don.....Kalamazoo  
Marshall, Evelyn W.....Kalamazoo  
Marshall, William P.....Kalamazoo  
Martens, Irvin J.....Kalamazoo  
McCarthy, Joseph S.....Kalamazoo  
McDonald, Marshall A.....Kalamazoo  
McNabb, Arthur A.....Kalamazoo  
Meyers, Lewis.....Kalamazoo  
Moe, Carl R.....Kalamazoo  
Morter, Roy A.....Kalamazoo  
Nell, Edward R.....Kalamazoo  
Nibbelink, Benjamin.....Kalamazoo

Patmos, Martin.....Kalamazoo  
Pearson, Edwin O.....Kalamazoo  
Peelen, J. William.....Kalamazoo  
Peelen, Matthew.....Kalamazoo  
Perry, Clifton W.....Kalamazoo  
Pier, Clarence T.....Kalamazoo  
Pratt, F. A.....(L) Kalamazoo  
Prentice, Hazel R.....Kalamazoo  
Prothro, Winston B.....Kalamazoo  
Pullon, Alton E.....Kalamazoo  
Rasmussen, Leo B.....Vicksburg  
Rigterink, Gerald H.....Kalamazoo  
Rigterink, H. A.....(L) Kalamazoo  
Rockwell, Donald C.....Kalamazoo  
Ryan, Frederick C.....Kalamazoo  
Sage, Edward D.....(L) Kalamazoo  
Scholten, D. J.....Kalamazoo  
Scholten, Roger A.....Kalamazoo  
Scholten, William.....Kalamazoo  
Schrier, Clarence M.....Kalamazoo  
Schrier, Paul C.....Kalamazoo  
Schrier, Thomas.....Comstock  
Scott, William A.....Kalamazoo  
Shackleton, William E.....(R) Kalamazoo  
Shook, Ralph W.....Kalamazoo  
Siemens, Walter J.....Kalamazoo  
Simpson, Bernard W.....Kalamazoo  
Sisk, Wilfred N.....Kalamazoo  
Sofen, Morris B.....Kalamazoo  
Southworth, Maynard N.....Schoolcraft  
Stiller, Anthony F.....Kalamazoo  
Stryker, Homer H.....Kalamazoo  
Upjohn, E. G.....Kalamazoo  
Upjohn, Lawrence N.....Kalamazoo  
VanderVelde, Kenneth M.....Kalamazoo  
Van Urk, Thomas.....(L) Miami Beach, Fla.  
Verhage, Martin D.....Kalamazoo  
Volderauer, John C.....Kalamazoo  
Westcott, Leo P.....Kalamazoo  
Wilbur, E. P.....(E) Kalamazoo  
Williamson, Edwin M.....Kalamazoo  
Youngs, A. S.....(E) Kalamazoo  
Youngs, Cyril A.....Kalamazoo  
Zolen, Margaret H.....Kalamazoo



# ROSTER

## Kent County

Adams, Frank A.....Grand Rapids  
Aitken, George T.....Grand Rapids  
Alberts, G. Donald.....Grand Rapids  
Alfenito, Felix S.....Grand Rapids  
Allen, R. V.....Grand Rapids  
Anderson, Karl A.....Grand Rapids  
Andre, Harvey.....Grand Rapids  
Avery, Noyes L.....Grand Rapids  
Baker, Abel J.....Grand Rapids  
Baert, George H.....(E) Grand Rapids  
Ballard, Milner S.....Grand Rapids  
Balyeat, Gordon W.....Grand Rapids  
Beaton, James H.....Grand Rapids  
Beeman, Carl B.....Grand Rapids  
Beets, W. Clarence.....Grand Rapids  
Bell, Charles M.....Grand Rapids  
Benjamin, Howard G.....Grand Rapids  
Benson, Roland R.....Grand Rapids  
Bergsma, Stuart.....Grand Rapids  
Bettison, William L.....(A) Lamont  
Beukema, Marenus J.....Grand Rapids  
Billings, Elton P.....(L) Grand Rapids  
Blackburn, Henry M.....Grand Rapids  
Bloxsom, Paul W.....Grand Rapids  
Boelkins, Richard C.....Grand Rapids  
Boersma, Donald.....Grand Rapids  
Boet, Frank A.....Grand Rapids  
Boet, John T.....Grand Rapids  
Bond, George L.....(L) Rapid City  
Bosch, Leon C.....Grand Rapids  
Botting, A. J.....Byron Center  
Brace, Fred C.....Grand Rapids  
Brayman, Charles W.....(L) Cedar Springs  
Brink, J. Russell.....Grand Rapids  
Brook, Jacob D.....(L) Grandville  
Brotherhood, James S.....Grand Rapids  
Bruggers, Lawrence.....(A) Philippine Islands  
Buist, S. J.....Grand Rapids  
Bull, Frank L.....Sparta  
Burlison, John S.....Grand Rapids  
Burling, Wesley M.....Grand Rapids  
Burroughs, Frank M.....Grandville  
Butler, Wm. J.....Grand Rapids  
Byrd, Mary Lou.....Grand Rapids  
Campbell, Alexander.....(E) Grand Rapids  
Carpenter, Luther C.....Grand Rapids  
Cayce, William.....Grand Rapids  
Chamberlain, Louis H.....(L) Grand Rapids  
Chandler, Donald.....Grand Rapids  
Clawson, Carroll K.....Grand Rapids  
Clayton, Robert W.....Grand Rapids  
Collisi, H. S.....Cleveland, Ohio  
Colvin, Walter G.....Grand Rapids  
Coppel, Lewis W.....Chillicothe, Ohio  
Corbus, Burton R.....(L) Grand Rapids  
Crane, Harold D.....Grand Rapids  
Currier, F. P.....Grand Rapids  
Dales, Ernest W.....Grand Rapids  
Damstra, Harold J.....Grand Rapids  
Davis, David B.....Grand Rapids  
Dean, Alfred W.....Grand Rapids  
DeBoer, Clarence J.....Grand Rapids  
DeBoer, Guy W.....Grand Rapids  
DeMaagd, Gerald.....Rockford  
DeMol, Richard J.....Grand Rapids  
Denham, R. H.....Grand Rapids  
DePree, Isla G.....Grand Rapids  
DePree, Joseph.....Grand Rapids  
Deurloo, Henry W.....Grand Rapids  
DeVel, Leon.....Grand Rapids  
DeVries, Daniel.....Grand Rapids  
Dewey, Kent A.....Grand Rapids  
DeYoung, Thies.....Sparta  
Dick, Mark W.....Grand Rapids  
Diskey, Donald.....Grand Rapids  
Doran, Frank.....Grand Rapids  
Droste, James C.....Grand Rapids  
DuBois, William J.....(L) Grand Rapids  
Ducey, Edward F.....Grand Rapids  
Duiker, Henry.....Grand Rapids  
Eaton, Robert M.....Grand Rapids  
Eggleston, H. R.....Grand Rapids  
Ellis, Michael.....Lowell  
Fahlund, George T. R.....Grand Rapids  
Failing, John F.....Grand Rapids  
Farber, Charles E.....Grand Rapids  
Faust, Lawrence W.....Grand Rapids  
Fellows, Kenneth E.....Grand Rapids  
Ferguson, James A.....Grand Rapids  
Ferguson, Lynn A.....Grand Rapids  
Ferguson, Ward S.....Grand Rapids  
Ferrand, Louis G.....Rockford  
Fiebing, Jack A.....Lowell  
Fitts, Ralph L.....Grand Rapids  
Flynn, J. Donald.....Grand Rapids

Fochtman, T. W.....Sparta  
Foshee, J. Clinton.....Grand Rapids  
Frantz, Charles H.....Grand Rapids  
Freyling, Robert A.....(A) Brooklyn, N. Y.  
Fuller, E. H.....Grand Rapids  
Fuller, William J.....East Grand Rapids  
Gamm, Kenneth E.....Grand Rapids  
Gibbs, Floyd F.....Grand Rapids  
Gilbert, Ralph H.....Grand Rapids  
Gillett, Frederick S.....(A) Ann Arbor  
Grant, Lee O.....Grand Rapids  
Grant, Lucile R.....Grand Rapids  
Grass, Edward J.....Grand Rapids  
Gray, Fred B.....Grand Rapids  
Graybiel, George P.....Caledonia  
Griffith, Lucian S.....Grand Rapids  
Haeck, William.....Grand Rapids  
Hagerman, D. B.....Grand Rapids  
Hammond, T. W.....(R) Grand Rapids  
Hardy, Faith F.....Grand Rapids  
Hayes, Lawrence W., Jr.....Grand Rapids  
Hayes, Lawrence W., Sr.....Howard City  
Heeterdicks, Dewey R.....Grand Rapids  
Henry, James, Jr.....Grand Rapids  
Herrick, Ruth.....Grand Rapids  
Hill, A. Morgan.....Grand Rapids  
Hodgen, John T.....Grand Rapids  
Hoffs, Albertus J.....Grand Rapids  
Holcomb, J. Winslow.....Grand Rapids  
Holdsworth, M. J.....Grand Rapids  
Holkeboer, Henry D.....Grand Rapids  
Hollander, Stephen.....Grand Rapids  
Hoogerhyde, Jack.....Grand Rapids  
Hufford, A. R.....Grand Rapids  
Hunderman, Edward.....Grand Rapids  
Hyland, William A.....Grand Rapids  
Jack, William W.....Grand Rapids  
Jameson, Fred M.....Grand Rapids  
Jaracz, Walter J.....Grand Rapids  
Jarvis, Charles.....Grand Rapids  
Johnston, William L.....Grand Rapids  
Jones, Horace C.....Grand Rapids  
Kelly, Edward F.....Grand Rapids  
Kemmer, Thomas R.....Grand Rapids  
Kendall, Eugene L.....Grand Rapids  
Kielhorn, Walter P.....Grandville  
Klaus, C. D.....Grand Rapids  
Kniskern, Paul W.....Grand Rapids  
Kooistra, Henry P.....Grand Rapids  
Kremer, John.....(L) Grand Rapids  
Kreulen, Henry J.....Grand Rapids  
Kriekard, P. J.....(L) Grand Rapids  
Laird, Robert G.....Grand Rapids  
Lanning, Nicholas E.....Grand Rapids  
Lentini, Joseph R.....Grand Rapids  
LeRoy, Simeon.....(L) Grand Rapids  
Liefers, Harry.....Grand Rapids  
List, Carl F.....Grand Rapids  
Logan, Wesley C.....Grand Rapids  
Logie, James W.....Grand Rapids  
MacDonell, James A.....Dearborn  
MacIntyre, Dugald.....Grand Rapids  
Marsh, John P.....Grand Rapids  
Martin, A. M.....Grand Rapids  
Martinus, Martin.....Grand Rapids  
Maynard, Mason S.....Grand Rapids  
McCormick, John K.....Grand Rapids  
McDougall, Wm. J.....Grand Rapids  
McDougall, Clarice.....Grand Rapids  
McKenna, Joseph L.....Grand Rapids  
McKinley, Leland M.....Grand Rapids  
Meade, Richard H., Jr.....Grand Rapids  
Miller, J. Duane.....Grand Rapids  
Miller, John J.....Marne  
Mitchell, W. B.....Grand Rapids  
Moen, Cornetta G.....Grand Rapids  
Moleski, Joseph V.....Grand Rapids  
Moleski, Leo T.....Grand Rapids  
Moleski, Stanley.....Grand Rapids  
Moll, Arthur M.....Grand Rapids  
Montgomery, John C.....Grand Rapids  
Morey, Edward C.....Grand Rapids  
Mouw, Dirk.....Grand Rapids  
Mulder, J. D.....Grand Rapids  
Murphy, Miles J.....Grand Rapids  
Nelson, A. R.....San Francisco, Calif.  
Noordewier, Albert.....(L) Grand Rapids  
Northouse, Peter B.....Grand Rapids  
Notier, Victor A.....Grand Rapids  
Oliver, Walter W.....Grand Rapids  
Olson, John R.....Grand Rapids  
Osborn, Howard A.....Grand Rapids  
Paalman, Russell J.....Grand Rapids  
Patterson, P. Wilfred.....Grand Rapids  
Payne, C. Allen.....Grand Rapids  
Pearson, Glenn A.....Grand Rapids

Pedden, John R., Jr.....Grand Rapids  
Plekker, J. D.....Grand Rapids  
Posthuma, A. E.....(A) Grand Rapids  
Pyle, Henry J.....Grand Rapids  
Quirk, Edmund J.....Grand Rapids  
Ragsdale, L. V.....Grand Rapids  
Ralph, L. Paul.....Grand Rapids  
Rasmussen, Richard A.....Grand Rapids  
Reed, Torrance.....Grand Rapids  
Reus, William F.....Grand Rapids  
Rigterink, John W.....Grand Rapids  
Riley, G. L.....Grand Rapids  
Robb, Charles S.....Grand Rapids  
Roberts, Mortimer E.....(E) Grand Rapids  
Robinson, Harold.....Grand Rapids  
Rodgers, William L.....Grand Rapids  
Rosenzweig, Leonard.....Grand Rapids  
Roth, Emil M.....Grand Rapids  
Ryan, John A.....Grand Rapids  
Schaubel, Howard J.....Grand Rapids  
Schermerhorn, L. J.....Grand Rapids  
Schnoor, E. W.....Grand Rapids  
Schnute, Louise F.....Grand Rapids  
Schuitema, Donald M.....Grand Rapids  
Scott, William B.....Grand Rapids  
Sculley, Raymond E.....Grand Rapids  
Sevensma, Elisha S.....Grand Rapids  
Sevensma, Eugene S.....Grand Rapids  
Sevey, Leon E.....Grand Rapids  
Shellman, Millard W.....Grand Rapids  
Shepard, B. H.....Lowell  
Sherwood, J. Vincent.....Grand Rapids  
Siddell, Chester M.....Grand Rapids  
Siddell, Richard H.....Grand Rapids  
Siebers, Bernard H.....Louisville, Ky.  
Slemmons, Clyde C.....(L) Grand Rapids  
Sluyter, J. S.....Grand Rapids  
Smith, A. B.....Grand Rapids  
Smith, Edwin M.....Grand Rapids  
Smith, R. Earle.....Grand Rapids  
Smith, Robert B.....Grand Rapids  
Snyder, Clarence.....Grand Rapids  
Southwick, G. Howard.....Grand Rapids  
Steffensen, Wallace H.....Grand Rapids  
Stonehouse, G. G.....Grand Rapids  
Stover, Virgil E.....Grand Rapids  
Stuart, Gerhardus J.....Grand Rapids  
Sugg, Cullen E.....Grand Rapids  
Sugiyama, Tisuo.....Grand Rapids  
Sus Strong, Carl A.....Grand Rapids  
Swenson, H. C.....Grand Rapids  
Ten Have, John.....Grand Rapids  
Tesseine, Arthur J.....Grand Rapids  
Teusink, J. H.....Cedar Springs  
Thompson, Archibald B.....(E) Grand Rapids  
Thompson, Athol B.....Grand Rapids  
Thompson, Edward C.....Grand Rapids  
Thompson, Frank D.....Grand Rapids  
Tidey, Marcus B.....Grand Rapids  
Tiffany, Joseph C.....Grand Rapids  
Torgerson, Wm. R.....Grand Rapids  
Truog, C. Peter.....Grand Rapids  
VanBelois, Harvard J.....Grand Rapids  
VanBree, R. S.....Grand Rapids  
VandenBerg, Henry J.....Grand Rapids  
VanderMeer, Ray.....Grand Rapids  
VanDuine, Henry J.....Grand Rapids  
Vann, Norman S.....Grand Rapids  
Van't Hof, Albert.....Grand Rapids  
Van Pernis, Paul A.....Grand Rapids  
VanNoord, Gelmer A.....Grand Rapids  
Van Solkema, Andrew.....Grand Rapids  
Van Solkema, Arthur.....Grandville  
VanWoerkom, Daniel.....Grand Rapids  
Van Zwalenburg, Benjamin R.....Grand Rapids  
Veldman, Harold E.....Grand Rapids  
Venema, Jay R.....Grand Rapids  
VerMeulen, John.....Grand Rapids  
Vining, Keats K., Jr.....Lowell  
Vis, William R.....Grand Rapids  
Vyn, Jay D.....Grand Rapids  
Weaver, Daniel C.....Grand Rapids  
Webber, Jerome.....Grand Rapids  
Wedgewood, Llewellyn G.....Grandville  
Wells, Merrill.....Grand Rapids  
Wenger, Aaron V.....Grand Rapids  
Wenger, John N.....Coopersville  
Whalen, John.....(A) Oceanside, Calif.  
Whinery, Joseph B.....(E) Grand Rapids  
Whinery, Joseph F.....Grand Rapids  
Willits, Paul W.....Grand Rapids  
Wilson, William E.....(R) Grand Rapids  
Winter, Garrett E.....Grand Rapids  
Wright, Thomas B.....Grand Rapids  
Wurz, John F.....Grand Rapids  
Yegge, J. P.....Kent City



## ROSTER

### Lapeer County

Bishop, G. Clare.....Almont  
Burley, David H.....(E) Almont  
Chapin, Clarence D.....Columbiaville  
Dorland, Clarke.....Lapeer  
Doty, James R.....Lapeer

Lass, E. H.....Lapeer  
McBride, John R.....Lapeer  
Merz, Henry G.....(E) Lapeer  
O'Brien, Daniel J.....Lapeer  
Palmer, Fred W.....Lapeer

Rehn, Adolph T.....Lapeer  
Smith, Glenn L.....Imlay City  
Thomas, J. Orville.....(E) North Branch  
Zemmer, Harry B.....Lapeer  
Zolliker, Carl R.....Imlay City

### Lewance County

Abraham, A. O.....Hudson  
Allen, Russell A.....Adrian  
Beebe, I. J.....Watsonville, Calif.  
Benz, Carl A.....Adrian  
Blair, Thomas H.....Adrian  
Blanchard, Lowell E.....Hudson  
Blanden, Merwin R.....Tecumseh  
Claxton, W. T.....Britton  
Colbath, W. E.....Adrian  
Conlin, Gladstone.....Adrian  
Dickman, Harry M.....Hudson  
Dustin, Richard E.....Tecumseh  
Hammel, H. H.....Tecumseh  
Hardy, P. B.....(L) Tecumseh

Harrison, Robert E.....Blissfield  
Heffron, Charles H.....Adrian  
Heffron, Howard H.....Adrian  
Helzerman, Ralph F.....Tecumseh  
Hewes, Wm. H.....Adrian  
Hinshaw, Warren V.....Adrian  
Hornsby, W. B.....Clinton  
Howland, F. A.....(L) Adrian  
Isley, H. E.....Blissfield  
Loveland, Horace H.....(E) Tecumseh  
Marsh, R. G. B.....Tecumseh  
Mast, Wesley H.....Tecumseh  
Miller, Perry L.....Adrian  
Morden, Esli T.....Adrian

Pasternacki, Arthur S.....Adrian  
Patmos, Bernard.....Adrian  
Purfield, Wm. P.....Clinton  
Raabe, E. C.....Morenci  
Rogers, John D.....Adrian  
Sayre, Phillip P.....Onsted  
Spalding, I. L.....(E) Hudson  
Stafford, Leo J.....Adrian  
Stark, Emily S.....Adrian  
Tubbs, R. V.....Blissfield  
VanDusen, Chad A.....Blissfield  
Whitehouse, Keith.....Morenci  
Wynn, G. H.....Adrian

### Livingston County

Barton, Thomas.....Howell  
Clarke, Niles A.....Brighton  
Duffy, Ray M.....Pinckney  
Fidler, Fred W.....Howell  
Finch, Edward D.....Howell  
Glenn, Bernard H.....Fowlerville

Hendren, J. J.....Fowlerville  
Hill, Harold C.....Howell  
Huntington, Harry G.....Howell  
Laboe, Edward W.....Howell  
Lieber, Robert W.....Howell

May, Louis Earl.....Fowlerville  
McDowell, Guy M.....Bay City  
Nicholas, Mildred V.....Howell  
Perry, Florence J. C.....Birmingham  
Sigler, Hollis L.....Howell  
Whitehouse, Walter M.....Ann Arbor

### Luce County

Campbell, Earl H.....Newberry  
Gibson, Robert E.....Newberry

Koss, Frank R.....Newberry  
Perry, Henry E.....(E) Lakeland, Florida  
Purnort, William R., Jr.....Newberry

Surrell, Mathew A.....Newberry  
Swanson, George F.....Detroit

### Macomb County

Allen, Leroy K.....Roseville  
Banting, O. Fenton.....Richmond  
Barker, John G.....Centerline  
Bower, A. B.....Armada  
Brady, Milo J.....St. Clair Shores  
Bryce, James W.....Centerline  
Buckley, Daniel J.....Mt. Clemens  
Croman, Joseph M., Jr.....Mt. Clemens  
Curlett, James E.....(L) Roseville  
Dudzinski, Edmund J.....New Baltimore  
Engels, John A.....Richmond  
Heine, Austin W.....Mt. Clemens  
Isbey, Edward K.....Centerline  
Jewell, James H.....Mt. Clemens  
Juliar, Joseph F.....Mt. Clemens  
Kane, William J.....Mt. Clemens

Lynch, Russell E.....Centerline  
Maguire, A. J.....Utica  
Miller, Sidney S.....East Detroit  
Moore, George F.....Mt. Clemens  
Mulligan, Philip T.....Mt. Clemens  
Parker, B. Morgan.....Utica  
Pidgion, Susan.....Richmond  
Reichman, Joseph J.....Mt. Clemens  
Reitzel, Rufus H.....Mt. Clemens  
Revere, J. O.....Mt. Clemens  
Rivard, Charles L.....Grosse Pointe Woods  
Roth, George E.....Detroit  
Rothman, Arthur M.....East Detroit  
Ruedisueli, Clarence A.....Roseville  
Salot, Russell F.....Mt. Clemens  
Scher, Joseph N.....Mt. Clemens

Scher, Sydney.....Mt. Clemens  
Siegfried, Edward G.....New Haven  
Singer, Nelson.....East Detroit  
Smith, Milton C.....Mt. Clemens  
Stone, Elizabeth A.....Romeo  
Stryker, Oscar D.....Mt. Clemens  
Sturm, Fred A.....St. Clair Shores  
Test, Frederick C., II.....Mt. Clemens  
Thompson, Alfred A.....Mt. Clemens  
Ullrich, Russell W.....Mt. Clemens  
Wellard, Henry C.....New Baltimore  
Whitley, Alec.....St. Clair Shores  
Wilke, M. M.....Warren  
Wiley, D. Bruce.....Utica  
Wolfson, Victor H.....Mt. Clemens  
Woods, H. B.....Fraser

### Manistee County

Grant, Charles L.....Manistee  
Hansen, Earnest C.....Manistee  
Konopa, John F.....Manistee  
Lalime, Ruth E.....Bear Lake

Lewis, Lee A.....(E) Manistee  
Miller, Ernest B.....Manistee  
Norconk, Ward H.....Bear Lake  
Oakes, Ellery A.....Manistee  
Ogilvie, Gordon D.....Manistee

Quinn, Henry M.....Copemish  
Ramsdell, Homer A.....Manistee  
Rowe, Robert E.....Manistee  
Switzer, Lars W.....Manistee

### Marquette-Alger Counties

Acocks, J. R.....Marquette  
Amolsch, Arthur L.....Marquette  
Baron, Benzoine C.....Munising  
Bennett, Arthur K.....Marquette  
Bennett, M. C.....Marquette  
Berry, Robert F.....Marquette  
Bertucci, Joseph P.....Ishpeming  
Bolitho, T. B.....Marquette  
Burke, R. A.....Negaunee  
Casler, W. L.....Marquette  
Cooperstock, M.....Marquette  
Corcoran, W. A.....Ishpeming  
Elzinga, Eugene R.....Marquette  
Erickson, Arvid W.....Ishpeming

Fennig, F. A.....Marquette  
Hirwas, C. L.....Marquette  
Hornbogen, D. P.....Marquette  
Howe, Lloyd W.....Marquette  
Jaedecke, R. G.....Ishpeming  
Jones, R. Grant.....Findley, Ohio  
Keskey, George I.....Marquette  
Knutson, George O.....Negaunee  
Lambert, W. C.....Marquette  
LeGovan, C.....Marquette  
Lyons, James.....Marquette  
McCann, Neal J.....Marquette  
Mudge, William A.....Negaunee

Narotzky, Archie S.....Ishpeming  
Nicholson, J. B.....Marquette  
Paine, Raymond Lee.....Negaunee  
Paull, Frank O.....Marquette  
Robbins, Nelson J.....(L) Negaunee  
Schweinsberg, Sara D.....Marquette  
Serbst, Charles A.....Marquette  
Swinton, A. L.....Marquette  
Talso, Jacob.....Ishpeming  
Tearman, Raymond A.....Munising  
Van Riper, Paul.....(L) Champion  
Waldie, George M.....Ishpeming  
Wickstrom, George B.....Munising  
Williams, R. G.....Ishpeming

### Mason County

Boldyreff, Ephraim.....Custer  
Comodo, Nicholas M.....Ludington  
Goulet, Leo J.....Ludington  
Hoffman, Howard B.....Ludington

Hunt, Ivan L.....Scottville  
Lintner, Roy C.....Ludington  
Martin, William S.....Ludington

Ostrander, Robert A.....Ludington  
Paukstis, Charles A.....Ludington  
Scott, Robert R.....Scottville  
Slaybaugh, James C.....Ludington



## ROSTER

### Mecosta-Osceola-Lake Counties

Bruggema, Jacob.....Evart  
Chess, Leo F.....Reed City  
Franklin, Benjamin L.....(L) Remus  
Ivkovich, Paul.....Reed City  
Jones, Archie.....Big Rapids  
Kilmer, David.....Reed City

Kilmer, Paul B.....Reed City  
Kowaleski, Edward.....Remus  
Merlo, Frank A.....Big Rapids  
Miller, Charles S.....Big Rapids  
Mitchell, H. C.....Big Rapids  
Nelson, Lorenzo.....Baldwin

Peck, Louis K.....(E) Barryton  
Trenor, Thomas P.....Big Rapids  
Van Auker, Edward A.....Big Rapids  
White, John A.....Big Rapids  
Yeo, Gordon H.....Big Rapids

### Medical Society of North Central Counties

Backe, John C.....Gaylord  
Boehm, John D.....(R) West Branch  
Clippert, Clarence G.....Grayling  
Coulter, Keith D.....Gladwin  
Egle, Joseph L.....Gaylord  
Forney, F. A.....Gaylord  
Hasty, Earl.....West Branch

Hayes, Louis O.....Grayling  
Hoenig, Andrew L.....Mancelona  
Jardine, Hugh M.....West Branch  
Keyport, Claude R.....Grayling  
Kirk, F. O.....Houghton Lake  
Kirk, J. G.....Houghton Lake  
Martzowka, M. A.....Roscommon

McDowell, Douglas B.....West Branch  
McKillop, G. L.....Gaylord  
Palm, George W.....Prudenville  
Peckham, Richard C.....Gaylord  
Stealy, Stanley A.....Grayling  
Timreck, Harold.....Gladwin

### Menominee County

Bruckardt, Herman R.....Menominee  
Clark, E. R.....Powers  
DeWane, Francis J.....Menominee  
DeWane, James N.....Menominee  
Flanagan, Clarence B.....Menominee

Glickman, L. Grant.....Marinette, Wis.  
Heidenreich, John R.....Daggett  
Higley, R. A.....Menominee  
Jones, William S.....Menominee  
Kaye, John T.....Menominee  
Kerwell, Karm C.....Stephenson

Peterson, Allen R.....Daggett  
Sawbridge, Edward.....(E) Stephenson  
Schroeder, John M.....Menominee  
Sethney, Henry T.....Menominee  
Towey, John W.....Powers

### Midland County

Ballmer, Robert S.....Midland  
Bowsher, Robert E.....Midland  
Bulmer, Dan J.....Midland  
Buskirk, Maurice D.....Midland  
Gay, Harold H.....Midland  
Gordon, Harold L.....Midland  
Gronemeyer, William H.....Midland

Grewe, Norman C.....Midland  
Hautau, Emily R.....Midland  
High, C. V., Jr.....Midland  
Howe, Irvin M.....Midland  
Ittner, Martin.....Midland  
Linseman, Karl W.....Midland  
MacCallum, Charles.....Midland

Maynard, W. A.....Coleman  
Meisel, Edward H.....Midland  
Pike, Melvin H.....Midland  
Poznak, Leonard A.....Midland  
Rice, Robert E.....Midland  
Sherk, Joseph H.....Midland  
Towsley, W. D.....Midland

### Monroe County

Acker, William F.....Monroe  
Ames, Florence.....Monroe  
Barker, Vincent L.....Monroe  
Blakey, L. C.....Monroe  
Bogucki, Chester.....Petersburg  
Bond, Franklyn.....Monroe  
Bond, W. W.....Monroe  
Cigany, Zoltan B.....Carleton  
Cook, Ernest A.....Centerville  
Dusseau, S. V.....(E) Erie  
Ewing, R. T.....Monroe  
Flanders, J. P.....Monroe  
Frery, R. A.....Monroe

Freud, John W.....Monroe  
Gelhaus, Wm. J.....Monroe  
Golinvaux, C. J.....Monroe  
Heffernan, John F.....Carleton  
Hensel, Hilda.....Monroe  
Hunter, M. A.....Monroe  
Johnson, A. Esther.....Monroe  
Karnopp, Irma.....Dwight, Ill.  
Kelso, S. Newton, Jr.....Monroe  
Lammers, Gerald.....Ida  
Landon, Herbert W.....(E) Monroe  
Long, Edgar C.....Monroe  
Long, Sara.....Monroe

McDonald, T. A.....Monroe  
McGeoch, R. W.....Monroe  
McMillin, J. H.....Monroe  
Meck, H. L.....Dundee  
Newcomer, Sheldon R.....Monroe  
Parmelee, O. E.....Lambertville  
Pinkus, Hermann.....Monroe  
Reisig, Albert H.....Monroe  
Sanger, Emerson J.....Monroe  
Tomlinson, Ledyard.....Newport  
Wagar, Spencer.....Monroe  
Williams, Robert J.....Monroe  
Williamson, George W.....Dundee

### Muskegon County

Anderson, A. J.....Muskegon  
Anderson, Axel W.....Lakewood Club  
Atkinson, A. L.....Muskegon Heights  
August, R. V.....Muskegon Heights  
Barnard, Helen S.....Muskegon  
Beers, C. W.....Muskegon Heights  
Benedict, Arthur L.....Muskegon  
Bloom, C. J.....Muskegon  
Bolthouse, Robert E.....Muskegon  
Boyd, D. R.....Muskegon  
Boyd, Jack L.....(A) Grand Rapids  
Bradshaw, Park S.....Muskegon  
Chapin, William S.....Muskegon Heights  
Christophersen, James W.....Muskegon  
Clapp, Henry W.....Muskegon  
Clark, Harry L.....Muskegon  
Closz, Harold F.....Muskegon  
Cohan, Sol G.....Muskegon  
Dasler, A. F.....Muskegon  
Derezinski, Clement F.....Muskegon  
Diskin, Frank L.....Muskegon  
Douglas, Robert J.....Muskegon  
Durham, Clarence J.....Muskegon  
Dykhuizen, Harold D.....Muskegon  
Eckerman, C. T.....Muskegon  
Ellis, Nicholas J.....Muskegon  
Emerick, Robert W.....Muskegon  
Fillingham, Enid.....Muskegon  
Fleischmann, C. B.....Muskegon  
Fleishman, Norman.....Muskegon  
Foss, Ed. O.....Muskegon

Gaikema, Everett W.....Muskegon  
Garber, Frank W. Jr.....Muskegon  
Gillard, James L.....Muskegon  
Goltz, Martha H.....Montague  
Greene, Henry P.....Muskegon  
Griffith, Robert M.....Muskegon  
Hagen, William A.....Muskegon  
Hannum, F. W.....Muskegon  
Harrington, A. F.....Muskegon  
Hartwell, Shattuck W.....Muskegon  
Heneveld, Edward H.....Muskegon  
Heneveld, John.....Muskegon  
Heneveld, Robert G.....Muskegon  
Holly, Leland E.....Muskegon  
Holmes, Roy H.....Muskegon  
Jiroch, John T.....Muskegon  
Joistad, Arthur H.....Muskegon  
Kane, Thomas J.....Muskegon  
Kay, Cecelia S.....Muskegon  
Keilin, Marie.....Muskegon  
Kennedy, Francis A.....Muskegon  
Kerr, Howard J.....Muskegon  
Lange, Eugene W.....Muskegon  
Lapham, Landin.....Whitehall  
Lauretti, Emil J.....Muskegon  
Laurin, Vilda S.....Muskegon  
LeFevre, Louis.....Muskegon  
LeFevre, William M.....Muskegon  
Loder, Leonel L.....Muskegon  
Loomis, John L.....Gatlinburg, Tenn.  
Mandeville, C. B.....Muskegon  
McNair, John N.....Muskegon

Medema, Paul E.....Muskegon  
Meegs, Marvin B.....Muskegon  
Miller, Philip L.....Muskegon  
Morford, F. N.....Muskegon  
Mulligan, A. W.....Muskegon  
Oden, Constantine L.....Muskegon  
Powers, Lunette.....(E) Muskegon  
Prentice, Edwin W.....Muskegon  
Price, Leonard.....Muskegon  
Pyle, Henry J.....Muskegon  
Risk, Robert A.....Muskegon  
Risk, Robert D.....Muskegon  
Scholle, Norbert.....Muskegon Heights  
Sears, Richard.....Muskegon  
Shebasta, Emil M.....Muskegon  
Smith, Mary L.....Muskegon  
Smith, M. Luther.....Muskegon  
Swartout, W. C.....Muskegon  
Swenson, Leland L.....Muskegon  
Teifer, Charles A.....Muskegon  
Tellman, H. Clay.....Muskegon  
Theime, S. W.....Ravenna  
Thomas, Edward.....Muskegon  
Thornton, Eugene S.....Muskegon  
Toy, Charles M.....Muskegon  
Vanderlaan, John E.....Muskegon  
Wagenaar, Edward H.....Muskegon  
Wiersma, Silas C.....Muskegon  
Wildgen, Bernard C.....Muskegon  
Wilke, Carl A.....Montague  
Williams, Edward V.....Muskegon Heights  
Wilson, P. S.....Muskegon

### Newaygo County

Cook, J. M.....Newaygo  
Deur, Theodore R.....Grant  
Geerlings, Lambert J.....Fremont

Geerlings, Ralph W.....Fremont  
Harris, Dean W.....Fremont  
Klein, J. Paul.....Fremont  
Masters, Brooker L.....Fremont

Moore, Hugh R.....Newaygo  
O'Neill, John W.....White Cloud  
Tompsett, Arthur C.....Hesperia

# ROSTER

## Northern Michigan

Albi, Robert J.....Boyne City  
 Alm, Bernhard T.....Petoskey  
 Barrett, J. L.....Petoskey  
 Blum, Benjamin B.....Petoskey  
 Burns, Dean C.....Petoskey  
 Chapman, Willis E.....(E) Cheboygan  
 Conti, Joseph B.....Petoskey  
 Conway, William S.....Petoskey  
 Grate, Lawrence E.....Charlevoix  
 Hegener, A. J.....Petoskey

Kirk, T. R.....Petoskey  
 Lance, Paul E.....Petoskey  
 Larson, Walter E.....Cheboygan  
 Lashmet, Floyd H.....Petoskey  
 Lentini, Nicholas.....Cheboygan  
 Lilga, Harris V.....Petoskey  
 Litzengruber, Albert F.....Boyne City  
 Martin, R. G.....Cheboygan  
 Mayne, Frederick C.....Cheboygan

McClintock, Robert S.....Charlevoix  
 Parks, William H.....Petoskey  
 Rodger, John R.....Bellaire  
 Saltonstall, Gilbert B.....Charlevoix  
 Savory, John.....East Jordan  
 Stringham, James R.....Cheboygan  
 Van Dellen, Jerrian.....East Jordan  
 Van Heldorf, Harry.....Boyne City  
 Weeber, Kathryn.....Petoskey  
 Wood, George A.....Onaway

## Oakland County

Abbott, Vernon C.....Pontiac  
 Adams, Frederick M.....Birmingham  
 Arnkoff, Harry.....Pontiac  
 Baker, Frederick A.....(R) Pontiac  
 Baker, Robert H.....Pontiac  
 Bannow, Robert J.....Pontiac  
 Barker, Howard B.....Pontiac  
 Bauer, Ernest W.....Hazel Park  
 Bauer, Edward G.....Pontiac  
 Beattie, W. G.....Ferndale  
 Beck, Otto O.....Birmingham  
 Berg, Richard H.....Oxford  
 Blakeney, James R.....Auburn Heights  
 Blue, Jane.....Pontiac  
 Boucher, R. E.....Royal Oak  
 Buehrig, Robert C.....Clarkston  
 Burke, Chauncey G.....Pontiac  
 Butler, Samuel A.....Pontiac  
 Calhoun, Ethel T.....Birmingham  
 Campbell, Malcolm D.....Royal Oak  
 Cefai, A. F.....Pontiac  
 Christie, J. W.....Pontiac  
 Cobb, Leon F.....Pontiac  
 Cobb, Thomas H.....Pontiac  
 Collins, Edward F.....Pontiac  
 Cooper, Robert J.....Pontiac  
 Cooley, Roy V. Jr.....Pontiac  
 Couche, Henry O.....Birmingham  
 Crissman, H. C.....Ferndale  
 Cudney, Ethan B.....Pontiac  
 Currier, R. Keith.....Pontiac  
 Dahlgren, Carl.....Keego Harbor  
 Darling, C. G. Jr.....Pontiac  
 Deutsch, William L.....Huntington Woods  
 Dobski, Edwin J.....Pontiac  
 Dunlap, Gregg L.....Keego Harbor  
 Dunn, Lewis E.....Berkley  
 Ekelund, Clifford T.....Pontiac  
 Endress, Zac.....Pontiac  
 Farnham, Lucius A.....(L) Pontiac  
 Ferris, Ralph G.....Birmingham  
 Fink, L. Jerome.....Pontiac  
 Fitzpatrick, Francis.....Pontiac  
 Flick, Earl J.....Royal Oak  
 Flick, John R.....Royal Oak  
 Foust, Earl W.....Royal Oak  
 Furlong, Harold A.....Pontiac  
 Gadbaw, Joseph J.....Farmington  
 Gaensbauer, Ferdinand.....Pontiac  
 Garipey, Bernard F.....Royal Oak  
 Gatley, C. R.....Pontiac  
 Gatley, L. Warren.....Pontiac  
 Gehringer, Norman F.....Pontiac  
 Geib, Ormond D.....Rochester  
 Gers, Frank B.....Pontiac  
 Gibson, James C.....(E) Milford  
 Gibson, Wellington C.....Milford

Gill, Matthew J.....Pontiac  
 Gradolph, P. L.....Ferndale  
 Grant, William A.....Milford  
 Green, James D.....Birmingham  
 Green, William M.....Pontiac  
 Hackett, Daniel J.....Pontiac  
 Haddock, D. A.....Pontiac  
 Hageman, George.....Bloomfield Hills  
 Halsted, Lee H.....Farmington  
 Hammonds, E. E.....Birmingham  
 Harsh, Robert C.....Pontiac  
 Harvey, Campbell.....Pontiac  
 Hasner, Robert B.....Royal Oak  
 Hassberger, J. B.....Birmingham  
 Hathaway, Clarence L.....Lake Orion  
 Hathaway, William.....Rochester  
 Hendren, Owen.....Pontiac  
 Henry, Colonel R.....Ferndale  
 Hensley, C. B.....Lake Orion  
 Hershey, Lynn N.....Birmingham  
 Howlett, E. V.....(L) Pontiac  
 Hoyt, Donald F.....Pontiac  
 Hubert, John R.....Pontiac  
 Hurst, Daniel D.....Pleasant Ridge  
 Hutchinson, W. G.....(L) Pontiac  
 Kemp, Felix J.....Pontiac  
 Kemp, W. Lloyd.....Birmingham  
 Koehler, William H.....Royal Oak  
 Kuhn, Henry.....Hazel Park  
 Lambie, John S.....Birmingham  
 Lambert, A. Gerald.....Royal Oak  
 Lewis, S. M.....Ferndale  
 Lockwood, C. E.....Holly  
 MacKenzie, O. R.....Walled Lake  
 Margrave, Edmund D.....Royal Oak  
 Markle, John G.....Royal Oak  
 Markley, John M.....Pontiac  
 Mason, Robert J.....Birmingham  
 McConkie, J. P.....Birmingham  
 McEvoy, Francis J.....Harbor Springs  
 McNeill, H. H.....Pontiac  
 Mehas, C. P.....Pontiac  
 Meinke, Herman A.....Hazel Park  
 Mercer, Frank A.....Pontiac  
 Merrill, Lionel N.....Royal Oak  
 Mershon, R. B.....Walled Lake  
 Miller, Hazen L.....Royal Oak  
 Miller, Sidney.....Birmingham  
 Mitchell, B. M.....Pontiac  
 Monroe, John D.....Pontiac  
 Neafe, Charles A.....Pontiac  
 Newcomb, Arnold B.....Berkley  
 Norup, John.....Berkley  
 Nosanchuk, Joseph.....Pontiac  
 Ohlmacher, A. P.....Royal Oak  
 Olsen, Richard E.....Pontiac  
 Palmer, Hayden.....Pontiac  
 Pauli, Theodore H.....Pontiac

Payton, Charles F.....Royal Oak  
 Pelletier, Charles J.....Hazel Park  
 Petroff, George N.....Pontiac  
 Porritt, Ross J.....Pontiac  
 Ports, Preston W.....Farmington  
 Prather, Frank.....Milford  
 Prevette, Isaac C.....Pontiac  
 Quarton, Albert E.....Birmingham  
 Raynale, George P.....Birmingham  
 Reid, Fred T.....Clawson  
 Riggs, Harry L.....Pontiac  
 Riker, Aaron D.....Pontiac  
 Roehm, Harold R.....Birmingham  
 Rowley, Laurie G.....Drayton Plains  
 Rupp, Edson C.....Royal Oak  
 Russell, Vincent P.....Royal Oak  
 Ruva, Joseph.....Pontiac  
 St. John, Harold A.....Pontiac  
 Schlechte, Carl.....Rochester  
 Schlechte, Eva L.....Rochester  
 Schoenfeld, John B.....Birmingham  
 Schuneman, Howard.....Ferndale  
 Shadley, Maxwell L.....Pontiac  
 Sheffield, L. C.....Pontiac  
 Sibley, H. A.....Pontiac  
 Simpson, E. K.....Pontiac  
 Smith, Carleton A.....Pontiac  
 Smith, Donald S.....Pontiac  
 Smith, Ellen.....Pontiac  
 Smith, George E.....Royal Oak  
 Spencer, Lloyd H.....Royal Oak  
 Spoehr, Eugene L.....Ferndale  
 Spohn, Earl W.....Royal Oak  
 Stageman, John C.....Pontiac  
 Stahl, Harold F.....Oxford  
 Stanley, William F.....Ferndale  
 Starker, C. T.....Pontiac  
 Steinberg, Norman.....Royal Oak  
 Steffes, Everett M.....Berkley  
 Stolpmann, A. K.....Birmingham  
 Sutton, Palmer E.....Royal Oak  
 Swickle, Edward F.....Clawson  
 Tauber, Abraham.....Pontiac  
 Tolle, Charles B.....Pontiac  
 Tuck, Raymond G.....Pontiac  
 Uloth, Milton J.....Ortonville  
 Van Haltern, H. L.....Pontiac  
 Virga, George M.....Huntington Woods  
 Wagley, P. V.....Pontiac  
 Wake, Douglas L.....Royal Oak  
 Watson, Thomas Y.....Birmingham  
 Weisberg, William E.....Royal Oak  
 Wessels, Robert R.....Birmingham  
 Williams, John P.....Pontiac  
 Wigent, Ralph D.....Pontiac  
 Winton, George J.....Ferndale  
 Young, Arthur R.....Pontiac

## Oceana County

Flint, Charles H.....Hart  
 Hasty, Willis A.....Shelby  
 Hayton, A. R.....Shelby

Heard, William H.....Pentwater  
 Jensen, Viggo.....Shelby  
 Munger, L. P.....(E) Hart  
 Nicholson, John H.....(E) Hart

Reetz, Fred A.....(A) Shelby  
 Robinson, Wm. G.....Hart  
 Wood, Merle G.....Hart

## Ontonagon County

Bender, Jesse L.....Mass  
 Hogue, H. B.....Ewen

Repola, K. L.....Ontonagon

Rubinfeld, Samuel H.....Ontonagon  
 Strong, W. F.....Ontonagon

## Ottawa County

Barrett, C. Dale.....(A) Grand Haven  
 Beernink, E. H.....Grand Haven  
 Bloemendaal, D. C.....Zeeland  
 Bloemendaal, W. B.....Grand Haven  
 Boone, Cornelius E.....Zeeland  
 Bulthuis, Jerry E.....Jamestown  
 Clark, Nelson H.....Holland  
 Cook, Carl S.....Holland  
 DeVries, H. G.....Holland  
 DeYoung, Fred W.....Spring Lake  
 Groat, Frank L.....Grand Haven  
 Hager, Ralph.....Hudsonville  
 Hamelink, H. M.....Holland

Harms, H. P.....Holland  
 Kemme, Gerrit.....Zeeland  
 Kitchel, John H.....Grand Haven  
 Kitchel, Mary.....Grand Haven  
 Kools, William C.....Holland  
 Leenhouts, Abraham.....(E) Holland  
 Long, C. E.....(L) Grand Haven  
 Nichols, Rudolph H.....Holland  
 Nykamp, Russell.....Zeeland  
 Presley, William J.....(L) Grand Haven  
 Rypkema, Willard M.....Grand Haven  
 Schalfenaar, R. H.....Holland

Schrick, Edna C.....Holland  
 Ten Have, Ralph.....Grand Haven  
 Timmerman, E. C.....Coopersville  
 Van Appledorn, Chester J.....Holland  
 Van Der Berg, E.....Holland  
 Van der Velde, O.....Holland  
 Van Kolken, P. J.....Grand Haven  
 Wells, Kenneth.....Spring Lake  
 Westrate, William.....Holland  
 Winter, John K.....Holland  
 Winter, William G.....Holland  
 Yonkman, Frederick F.....Madison, N. J.



# ROSTER

## Saginaw County

Ackerman, Gerald L.....	Saginaw	Helmkamp, Herbert O.....	Saginaw	Murray, Charles R.....	Saginaw
Anderson, William K.....	Saginaw	Hester, Eustace G.....	Saginaw	Murray, Morris J.....	Saginaw
Bagley, Ulysses S.....	Saginaw	Hill, Victor L.....	Saginaw	Nelson, Oscar.....	Saginaw
Berberovich, Thomas F.....	Saginaw	Hohn, Fred Jr.....	Saginaw	Northway, Robert O.....	Saginaw
Bishop, H. Mortimer.....	Saginaw	Howell, Don M.....	Saginaw	Novy, Frank O.....	Saginaw
Brender, Fred P.....	Frankenmuth	Jaenichen, Robert.....	Saginaw	Olson, Carl Porter.....	Saginaw
Brock, W. H.....	(L) Saginaw	James, J. W.....	Saginaw	Ostrander, Frank W.....	Freeland
Bruton, Martin F.....	Saginaw	Jiroch, Ralph S.....	Saginaw	Phillips, Homer A.....	Saginaw
Bucklin, Robert.....	Saginaw	Jordan, Leo A.....	Saginaw	Pietz, Frederick.....	Saginaw
Butler, Milton G.....	Saginaw	Kemp, J. N.....	(L) Saginaw	Pillsbury, Edward A.....	Frankenmuth
Button, Aaron C.....	Saginaw	Kempton, Rockwell M.....	Saginaw	Poole, Frank A.....	(L) Saginaw
Cady, Frederick J.....	Saginaw	Kerr, William B.....	Saginaw	Potvin, Clifford D.....	Saginaw
Cameron, Allen K.....	Saginaw	Keyes, James T.....	Birch Run	Richards, Ned W.....	Saginaw
Campbell, Lloyd A.....	Saginaw	Kleekamp, Herbert J.....	Saginaw	Richter, Harry J.....	Saginaw
Catizone, Roy J.....	Merrill	Kolesar, R. C.....	Saginaw	Roggen, Ivan J.....	Saginaw
Chisena, Peter R.....	Bridgeport	Kowals, Francis V.....	Saginaw	Ryan, M. D.....	(E) Saginaw
Clark, Wilbert B.....	(L) Kenmore, N. Y.	LaPorte, Lawrence A.....	Saginaw	Ryan, Richard S.....	Saginaw
Claytor, Archer A.....	Saginaw	Ling, Kenneth C.....	Hemlock	Sample, John T.....	Saginaw
Cortopassi, Andre J.....	Saginaw	Lohr, Oliver W.....	Saginaw	Sargent, Donald V.....	Saginaw
Cortopassi, Vital E.....	Saginaw	Longstreet, Martha L.....	Saginaw	Schaeberger, Elmer G.....	Saginaw
Cory, Charles W.....	Saginaw	Luger, Frederick E.....	Saginaw	Schultz, F. R.....	Chesaning
Curtis, James H.....	Saginaw	Lurie, Robert.....	Saginaw	Sharp, Martin C.....	Saginaw
Durman, Donald C.....	Saginaw	Lyle, Richard C.....	Bridgeport	Sheldon, Suel A.....	Saginaw
Ely, Cecil W.....	Saginaw	MacKinnon, Edwin D.....	Saginaw	Siler, Delbert E.....	Saginaw
Ernst, Arthur R.....	Saginaw	MacMeekin, James W.....	Saginaw	Skowronski, Casimer A.....	Saginaw
Fleschner, Thomas E.....	Birch Run	Manning, John E.....	Saginaw	Slack, Walter K.....	Saginaw
Gage, David P.....	Saginaw	Markey, Francis L.....	Saginaw	Stahly, Edward.....	Saginaw
Galsterer, Edwin C.....	Saginaw	Markey, Joseph P.....	Saginaw	Stander, A. Carl.....	Saginaw
Gardner, Joe H.....	Saginaw	Martozowa, William P.....	Saginaw	Stewart, George W.....	Saginaw
Gerber, Herbert V.....	Saginaw	Matthews, Harry C.....	Saginaw	Thompson, Arthur B.....	Saginaw
Goman, Louis D.....	Saginaw	Maurer, John A.....	Saginaw	Tiedke, G. E.....	Saginaw
Goodsell, J. Orton.....	Saginaw	Mayne, Harold E.....	Saginaw	Topp, Edwin W.....	Saginaw
Grigg, Arthur.....	(E) Saginaw	McKinney, Alexander R.....	Saginaw	Toshach, Clarence E.....	Saginaw
Grigg, Arthur P.....	Saginaw	McLandress, Joshua A.....	(L) Saginaw	Volk, V. K.....	Saginaw
Hand, Eugene A.....	Saginaw	Meyer, Henry J.....	(E) Saginaw	Wallace, Herbert C.....	Saginaw
Harvie, L. C.....	Saginaw	Moon, A. R.....	Saginaw	Westlund, Norman.....	Saginaw
Heavenrich, Robert M.....	Saginaw	Morgette, Leonard J.....	Saginaw	Wilson, H. Roy.....	(R) Saginaw
		Mudd, Richard D.....	Saginaw	Wright, Edwin M.....	Saginaw
		Murphy, Albert P.....	Saginaw	Yntema, Stuart.....	Saginaw

## Sanilac County

Bennett, William G.....	Brown City	Learmont, H. H.....	Croswell	Seager, M. Cole.....	Brown City
Blanchard, Ernest W.....	Deckerville	McCrea, John W.....	Marlette	Tweedie, G. Evans.....	Sandusky
Gift, Weldon A.....	Marlette	McGuegle, K. T.....	Sandusky	Tweedie, S. Martin.....	Sandusky
Hart, Robert K.....	Croswell	Ruhl, Frank.....	Croswell	Webster, John C.....	Marlette

## St. Clair County

Banting, Kenneth C.....	Port Huron	Clyne, B. C.....	Yale	Martin, Clyde S.....	Port Huron
Battle, J. C. Sinclair.....	Port Huron	Cooper, T. H.....	Port Huron	McColl, D. J.....	(E) Port Huron
Beck, Frank K.....	Port Huron	Doerger, T. E.....	Marine City	Meredith, E. W.....	Port Huron
Beer, Joseph F.....	St. Clair	Fitzgerald, E. W.....	Port Huron	Novak, Walter S.....	Port Huron
Benjamin, Clayton C.....	Port Huron	Gilmore, John R.....	Port Huron	Patterson, D. Webster.....	Port Huron
Biggar, R. J.....	Persian Gulf	Gobeille, Alfred B.....	Algonac	Pollack, Donald A.....	Yale
Borden, Charles L.....	Port Huron	Gunderson, Edward P.....	St. Clair	Sanderson, Joseph L.....	Port Huron
Bottomley, Thomas H.....	Port Huron	Hazledine, Herbert J.....	Port Huron	Schaefer, W. A.....	Port Huron
Boughner, Walter H.....	Algonac	Holcomb, R. J.....	Marine City	Sites, E. C.....	Port Huron
Bovee, M. E.....	Port Huron	Hoyt, Charles N.....	Port Huron	Thomas, C. F.....	Port Huron
Bowden, William S.....	Marine City	Kahn, Oscar B.....	Capac	Treadgold, Douglas.....	Port Huron
Brush, Howard O.....	Port Huron	Kel, George M.....	Port Huron	Vroman, M. E.....	Port Huron
Burley, Jacob H.....	Port Huron	Kimball, F. Bruce.....	Port Huron	Ware, John R.....	Port Huron
Campbell, Mary B.....	Port Huron	Lauridsen, James.....	Port Huron	Wass, Henry C.....	St. Clair
Carey, Lewis M.....	Port Huron	Le Galley, Kenneth B.....	Port Huron	Waters, George.....	Port Huron
Carney, F. V.....	St. Clair	Licker, R. R.....	Port Huron	Wetzel, John O.....	Port Huron
Clifford, Robert P.....	St. Clair	Ludwig, Claude A.....	Port Huron	Wight, William G.....	Yale
		Ludwig, F. E.....	Port Huron		

## St. Joseph County

Berg, Lawrence A.....	Sturgis	McGrath, Neill B. Jr.....	Three Rivers	Reed, Fred R.....	Three Rivers
Blood, John V.....	Three Rivers	Miller, Charles G.....	Sturgis	Sheldon, John P.....	Sturgis
Braham, Wilbur G.....	Sturgis	Myer, Clifton G.....	Colon	Slote, Leal K.....	Constantine
Brunson, Allen E.....	Sturgis	Olney, Harold E.....	Leonidas	Springer, Russell A.....	Centerville
Figel, Samuel A.....	Sturgis	Parrish, Marion F.....	Sturgis	Sweetland, George J.....	Constantine
Fortner, Roscoe J.....	Three Rivers	Pennington, Harry C.....	White Pigeon	Tesar, Frank J.....	Centerville
Gillespie, Eleanor M.....	Sturgis	Penzotti, Stanley C.....	Three Rivers	Weir, Dale C.....	Three Rivers
Hoekman, Aben.....	Constantine	Porter, C. G.....	Three Rivers	Zimont, Raymond D.....	Constantine

## Shiawassee County

Arnold, Alfred L. Jr.....	Owosso	Harkness, Carleton A.....	Owosso	Pochert, Rolland C.....	Owosso
Bennett, George W.....	Elsie	Hoshal, Verne L.....	Durand	Richards, Chester J.....	Durand
Brown, Richard C.....	Owosso	Hume, Arthur M.....	(E) Owosso	Sahlmark, Joseph F.....	Owosso
Brown, Richard J.....	Owosso	Hume, Harold A.....	Owosso	Shepherd, Walter F.....	Owosso
Brown, Robert W.....	Owosso	Janci, Julius S.....	Owosso	Slagh, Earl M.....	Elsie
Buzzard, Walter D.....	Chesaning	McKnight, Edwin R.....	Owosso	Smith, Frank W.....	Owosso
Chipman, E. M.....	Owosso	Merz, Walter L.....	Owosso	Weinkauf, William F.....	Corunna
Dillon, Thomas J.....	Perry	Parker, Walter T.....	Owosso	Weston, Claude L.....	Owosso
Fillinger, Wells B.....	Ovid			Wilson, Norman R.....	Durand



# ROSTER

## Tuscola County

Ballard, James H.....Cass City  
Barbour, Harry A.....Mayville  
Bates, George.....(E) Kingston  
Berman, Harry.....Millington  
Cook, Raymond.....Akron  
Dickerson, Willard W.....Caro  
Dixon, Robert L.....Caro

Donahue, Harold T.....Cass City  
Flett, Richard O.....Millington  
Gugino, Frank J.....Reese  
Howlett, R. R.....Caro  
Kaven, G. H.....Unionville  
Merrill, Elmer H.....Caro

Morris, Frank L.....Cass City  
Nigg, Herbert.....Caro  
Pelcar, Walter.....Unionville  
Ruskin, D. B.....Caro  
Savage, Lloyd L.....Caro  
Shoemaker, J.....Vassar  
Swanson, E. C.....Vassar

## Van Buren County

Boothby, Carl F.....Lawrence  
Boothby, F. M.....Lawrence  
Boothby, Paul R.....Lawrence  
Bope, William P.....(E) Decatur  
Buckborough, M. W.....South Haven  
Copeland, Evan L.....Decatur  
Diephuis, Bert.....South Haven  
French, Merle R.....Hillsdale

Gano, Avison.....Bangor  
Giffen, John R.....(E) Bangor  
Hoyt, W. F.....(E) Paw Paw  
Itzen, J. F.....South Haven  
Kleber, John A.....South Haven  
Maxwell, J. Charles.....(E) Paw Paw  
McFadden, R. I.....Bloomington  
Penoyer, C. L.....South Haven

Ralyea, John R.....Paw Paw  
Roberts, Millard S.....South Haven  
Spalding, R. W.....Gobles  
Steele, Arthur H.....Paw Paw  
Ten Houten, Charles.....Paw Paw  
Terwilliger, Edwin H.....South Haven  
Urist, Martin J.....South Haven  
Young, William R.....Lawton

## Washtenaw County

Adcock, John.....Ann Arbor  
Aldredge, George N. Jr.....(A) Ann Arbor  
Aldridge, Charles W.....(A) Ann Arbor  
Alexander, John.....Ann Arbor  
Allen, Arthur W.....(A) Ann Arbor  
Anderson, William C.....(A) Ann Arbor  
Atchison, Russell M.....Northville  
Badgley, C. E.....Ann Arbor  
Banta, Edwin V. Jr.....(A) Ann Arbor  
Barker, Paul S.....Ann Arbor  
Barnwell, John.....Washington, D. C.  
Barss, Harold D.....Ypsilanti  
Barss, William A.....Ypsilanti  
Bass, Thomas J.....Ypsilanti  
Bassett, Robert C.....Ann Arbor  
Bassow, Paul.....Ann Arbor  
Bauer, Gerhard H.....(A) Ann Arbor  
Bauer, Jere M.....Ann Arbor  
Baugh, Richard H.....Ypsilanti  
Beebe, Hugh M.....Ann Arbor  
Beierwaltes, William H.....Ann Arbor  
Bell, Margaret.....Ann Arbor  
Belsor, Walter.....Ann Arbor  
Benz, Alvin H.....Ann Arbor  
Bethel, Frank H.....Ann Arbor  
Bohne, A. Waite.....Ann Arbor  
Bovill, Edwin G. Jr.....(A) Ann Arbor  
Boyer, Harold L.....(A) Ann Arbor  
Brace, William M.....Ann Arbor  
Brown, Earle O., Jr.....Ypsilanti  
Brown, Phillip.....Ypsilanti  
Bryant, Henry C.....Ann Arbor  
Butler, William J.....(A) Ann Arbor  
Buxton, Robert W.....Ann Arbor  
Camp, Carl D.....Ann Arbor  
Campbell, Robert M.....(A) Ann Arbor  
Cawley, Edward P.....Ann Arbor  
Cheney, William D.....(A) Ann Arbor  
Clarke, Robert B.....Ann Arbor  
Clements, Glenn T.....Ann Arbor  
Clyde, Ensign E.....Plymouth  
Coller, Frederick A.....Ann Arbor  
Conn, Jerome W.....Ann Arbor  
Cooper, Donald R.....(A) Ann Arbor  
Coyle, James E.....(A) Ann Arbor  
Coxon, Alfred W.....Ann Arbor  
Craig, William R. Jr.....(A) Ann Arbor  
Cranmer, L. Reed.....(A) Ann Arbor  
Crockett, Charles A.....Kansas City  
Crook, Clarence E.....Ann Arbor  
Cummings, Howard H.....Ann Arbor  
Curtis, Arthur C.....Ann Arbor  
Dalton, Arthur M.....(A) Ann Arbor  
DeJong, Russell N.....Ann Arbor  
DeTar, John S.....Milan  
DeWeese, Marion S.....Ann Arbor  
Dingman, Reed O.....Ann Arbor  
Dolfin, Wilbur E.....Ann Arbor  
Donaldson, Sam W.....Ann Arbor  
Donovan, Eugene T.....Ypsilanti  
Duff, Ivan F.....Ann Arbor  
Edwards, Aaron R.....Ann Arbor  
Engelke, Otto K.....Ann Arbor  
Everett, Melden.....Ann Arbor  
Falls, Harold F.....Ann Arbor  
Fink, George C.....Ann Arbor  
Fish, Robert G.....(A) Ann Arbor  
Fisher, Joseph V.....Chelsea  
Follo, Marshall L.....(A) Ann Arbor  
Forsythe, Warren E.....Ann Arbor  
Fox, Ralph M.....(A) Ann Arbor  
Fralick, F. Bruce.....Ann Arbor  
Francis, Thomas Jr.....Ann Arbor  
Frost, Lyle W.....Ypsilanti  
Frye, Carl H.....Ann Arbor  
Fulton, John K.....(A) Appleton, Wisc.  
Furstenberg, Albert C.....Ann Arbor  
Ganzhorn, Edwin C.....Ann Arbor

Gates, John L.....Ann Arbor  
Gates, Neil A. Jr.....Ann Arbor  
Gignac, Ralph M.....Wayne  
Gordy, Philip.....(A) Ann Arbor  
Gotz, Alexander.....Ann Arbor  
Grawn, Frank A.....Ypsilanti  
Greenway, Guerdon D.....Ypsilanti  
Grekin, Robert.....(A) Ann Arbor  
Gulde, Andros.....(L) Chelsea  
Gulick, Arthur E.....(A) Ann Arbor  
Gustafson, Jack R.....(A) Ann Arbor  
Haas, Reynold L.....Ann Arbor  
Hagerman, George W.....Ann Arbor  
Haight, Cameron.....Ann Arbor  
Hammond, W. W.....Plymouth  
Handorf, Heinrich H.....Northville  
Hannum, M. R.....Milan  
Harris, Bradley M.....Ypsilanti  
Harris, Scott T.....Ypsilanti  
Harrelson, William D.....(A) Ann Arbor  
Henderson, John W.....Ann Arbor  
Henry, L. Dell.....Ann Arbor  
Himler, Leonard E.....Ann Arbor  
Hinerman, Dorin L.....Ann Arbor  
Hodges, Fred J.....Ann Arbor  
Holt, John F.....Ann Arbor  
Hoobler, Sibley W.....Ann Arbor  
House, Frederick B.....Ann Arbor  
Howard, S. C.....Ann Arbor  
Hunsberger, Walter G.....(A) Ann Arbor  
Ideson, Robert S.....Ann Arbor  
Jackson, Raymond S.....(A) Ann Arbor  
Jacob, Peyton.....(A) Ann Arbor  
Jimenez, Buenaventura.....Ann Arbor  
Johnston, Franklin D.....Ann Arbor  
Jones, Edward V.....Ypsilanti  
Jurasek, Valeria R.....Ann Arbor  
Juzek, Robert H.....(A) Ann Arbor  
Kahn, Edgar A.....Ann Arbor  
Kambly, Arnold H.....Ann Arbor  
Keene, Clifford H.....Ann Arbor  
Kemper, John W.....Ann Arbor  
Kiess, Robert D.....(A) Ann Arbor  
King, Walter G.....(A) Ann Arbor  
Kirkman, Lewis.....Ann Arbor  
Knoll, Leo A.....Ann Arbor  
LaCore, Ivan A.....Ypsilanti  
LaFever, Sidney L.....Ann Arbor  
Lampe, Isadore.....Ann Arbor  
Lapides, Jack.....(A) Ann Arbor  
Law, John L.....Ann Arbor  
Levin, Manuel.....(A) Ann Arbor  
Lichty, Dorman E.....Ann Arbor  
Lloyd, Robert E.....Ann Arbor  
Locklin, W. Kaye.....Ann Arbor  
Lowell, Vivion F.....Ypsilanti  
MacIntyre, Robert S.....Ann Arbor  
Mahon, Ralph D.....(A) Ann Arbor  
Malcolm, Karl D.....Ann Arbor  
Maley, John.....(A) Ann Arbor  
Marshall, John S.....(A) Ann Arbor  
Marshall, Mark.....Ann Arbor  
Martin, Donald W.....Ypsilanti  
Mathews, Kenneth P.....(A) Ann Arbor  
Maxwell, James H.....Ann Arbor  
McEachern, Thomas H.....Ann Arbor  
Meyers, Muriel C.....Ann Arbor  
Milford, Albert F.....Ypsilanti  
Miller, Harold A.....Saline  
Miller, Norman F.....Ann Arbor  
Mills, Richard W.....(A) Ann Arbor  
Moorestein, Benjamin.....(A) Ann Arbor  
Muehlgi, George F.....Ann Arbor  
Musselman, Merle M.....(A) Ann Arbor  
Myers, Dean W.....Ann Arbor  
Nesbit, Reed M.....Ann Arbor  
Newton, Charles W. Jr.....Ann Arbor  
Nickel, Kenneth C.....East Grand Rapids  
Obenauf, Walter H.....Ypsilanti

O'Connor, Sylvester J.....(A) Ann Arbor  
Parnall, Christopher G.....Ann Arbor  
Parrott, Max H.....(A) Ann Arbor  
Patterson, Ralph M.....Ann Arbor  
Peeler, Robert A.....(A) Ann Arbor  
Pollard, H. Marvin.....Ann Arbor  
Potter, Marcia.....Ypsilanti  
Price, Helen F.....Ann Arbor  
Prout, Gordon J.....Saline  
Quilligan, James J. Jr.....Ann Arbor  
Rabinovitch, Bella.....Ypsilanti  
Ransom, Henry K.....Ann Arbor  
Raphael, Theophile.....Ann Arbor  
Ratliff, Rigdon K.....Ann Arbor  
Riecker, H. H.....Ann Arbor  
Riggs, Harold W.....Ann Arbor  
Robinson, William D.....Ann Arbor  
Ross, C. H.....Ann Arbor  
Saunders, Allen.....Ann Arbor  
Sayre, George S.....Ypsilanti  
Schaiberger, George L.....(A) Ann Arbor  
Schoch, Henry K. Jr.....(A) Ann Arbor  
Schumacker, William E.....Ann Arbor  
Scovill, Henry A.....Ypsilanti  
Seever, Maurice H.....Ann Arbor  
Seigel, Daniel C.....(A) Ann Arbor  
Seime, Reuben I.....Ypsilanti  
Shapiro, Hyman D.....(A) Ann Arbor  
Sheldon, John M.....Ann Arbor  
Sibbald, Malcolm L.....Chelsea  
Sink, Emory W.....Ann Arbor  
Slenger, Walworth R.....Ann Arbor  
Smith, Eleanor.....Ann Arbor  
Smith, Philip W.....(A) Ann Arbor  
Sparling, Irene M.....Northville  
Spears, Clarence W.....Ypsilanti  
Stewart, Wayne H.....(A) Ann Arbor  
Stocker, Marvin L.....Ypsilanti  
Stow, Robert M.....(A) Ann Arbor  
Strayer, John W.....(A) Ann Arbor  
Struthers, J. N. P.....Ypsilanti  
Sturgis, Cyrus C.....Ann Arbor  
Sundwall, John.....Ann Arbor  
Swank, Helen S.....Ann Arbor  
Taylor, George D.....(A) Ann Arbor  
Teed, Reed W.....Ann Arbor  
Thieme, E. Thurston.....Ann Arbor  
Thompson, Alden S.....(A) Ann Arbor  
Thomson, Daniel C.....(A) Ann Arbor  
Tompsett, Arthur C., Jr. (A) Ann Arbor  
Towsley, Harry A.....Ann Arbor  
Ulmer, Arthur H.....(A) East Ann Arbor  
VanDuzen, V. L.....Ypsilanti  
Waggoner, Raymond W.....Ann Arbor  
Waldron, Alexander M.....Ann Arbor  
Washburne, Charles L.....(L) Ann Arbor  
Watson, Ernest H.....Ann Arbor  
Weeks, William F.....(A) Ann Arbor  
Weller, Keith E.....Chicago, Ill.  
Wessinger, John A. (E) Richmond, Ind.  
Westcott, George W.....Ypsilanti  
Westenberg, Martha R.....Ann Arbor  
Westover, Charles J.....Plymouth  
Wetterstrom, R. G.....Northville  
Wile, Udo J.....Ann Arbor  
Williams, Howard R.....Ann Arbor  
Williamson, Frederick B.....Ypsilanti  
Wilson, Frank N.....Stockbridge  
Wilson, James L.....Ann Arbor  
Wisdom, Inez R.....Ann Arbor  
Wollum, Arnold.....(A) Ann Arbor  
Woods, J. J.....Ypsilanti  
Worth, Melissa H.....Ypsilanti  
Wright, Walter J.....Ypsilanti  
Wylie, William C.....(L) Dexter  
Yoder, O. R.....Ypsilanti  
Zarafonetis, Chris J. D.....Ann Arbor  
Zerbi, Victor M.....Willow Run Village



# ROSTER

## Wayne County

Aaron, Charles D.....	(E) Detroit	Bates, Gaylord S.....	Dearborn	Brady, Herbert A.....	River Rouge
Abbott, William E.....	Detroit	Bauer, Benedict J.....	Detroit	Braitman, Louis.....	Detroit
Abruzzo, Anthony M.....	Eloise	Bauer, A. Robert.....	Detroit	Braley, William N.....	Detroit
Adair, Robin.....	Detroit	Bauer, Lester Eugene.....	Detroit	Bramigk, F. W.....	Detroit
Adamian, Gerald.....	Detroit	Baumer, Moe.....	Detroit	Brand, Benjamin.....	Detroit
Adams, James R.....	Dearborn	Baumgarten, Elden C.....	Detroit	Brandt, Edward L.....	Detroit
Adelson, Sidney L.....	Detroit	Bayles, John G.....	Detroit	Braun, Lionel.....	Detroit
Adler, Morton.....	Centerline	Beach, Watson.....	Detroit	Braverman, Morris M.....	Detroit
Adler, Sidney.....	Detroit	Beam, A. Duane.....	Detroit	Breitenbecher, E. R.....	Detroit
Agnew, George H.....	Detroit	Beamer, George D.....	Dearborn	Brekke, Viola G.....	Detroit
Akroyd, Cecil.....	Detroit	Beaton, Colin.....	Detroit	Bremer, William M.....	Detroit
Albrecht, Herman F.....	Detroit	Beattie, Robert.....	(L) Detroit	Brengle, Deane R.....	Dearborn
Alderman, R. F.....	Detroit	Beaver, Donald C.....	Detroit	Brent, Morris S.....	Detroit
Aldrich, Gordon E.....	Detroit	Becker, Abraham.....	Detroit	Breon, Guy L.....	Detroit
Alexander, Eugene J.....	Detroit	Becker, Joseph W.....	Detroit	Brey, Norman.....	Detroit
Alford, E. S.....	Belleville	Becklein, Clarence L.....	Detroit	Briegel, Walter A.....	Detroit
Allen, John V.....	Lincoln Park	Beckwith, Carl C.....	Detroit	Briggs, William J.....	Detroit
Alles, Russell W.....	Detroit	Beckwith, Morris C.....	Detroit	Brines, Osborne A.....	Detroit
Allison, Herbert C.....	Grosse Pointe Farms	Bedell, Archie A.....	Detroit	Bringard, Elmer L.....	Detroit
Alper, Louis.....	Detroit	Beers, Morrison D.....	Detroit	Brisbois, Harold J.....	Plymouth
Alpiner, Sam.....	Detroit	Beeuwkes, L. E.....	Dearborn	Brisson, Joseph C.....	Detroit
Altman, Raphael.....	Detroit	Behn, Claud W.....	Detroit	Broadman, Sylvan.....	Detroit
Altschuler, Abraham M.....	Detroit	Beigler, Sydney K.....	Detroit	Bromme, William.....	Detroit
Altschuler, Ira M.....	Detroit	Beitman, Max R.....	Detroit	Bronson, William W.....	Detroit
Altschuler, Samuel S.....	(A) Battle Creek	Belanger, Ernest E.....	River Rouge	Brooks, Clark D.....	(L) Detroit
Amos, Thomas G.....	Detroit	Belanger, Henri.....	(E) River Rouge	Brooks, Charles W.....	Detroit
Anderson, Bruce.....	(L) Detroit	Belanger, William George.....	Detroit	Brooks, Nathan.....	Detroit
Anderson, C. P.....	Eloise	Belisle, John A.....	Eloise	Brosius, William L.....	Detroit
Anderson, Gordon H.....	Dearborn	Belknap, Warren F.....	Royal Oak	Broudo, Philip H.....	Detroit
Anderson, James O.....	Detroit	Bell, J. Kenner.....	Detroit	Brough, Glen A.....	Detroit
Anderson, Walter L.....	Detroit	Bell, William M.....	Detroit	Brown, Audrey O.....	Detroit
Anderson, Walter T.....	Detroit	Benjamin, William O.....	Detroit	Brown, Carlton F.....	Detroit
Andries, George H., Jr.....	Detroit	Bennett, Germany E.....	Detroit	Brown, Charles H.....	Wyandotte
Andries, Joseph H.....	(E) Detroit	Bennett, Harry B.....	Detroit	Brown, Frances.....	Detroit
Andries, Raymond C.....	Detroit	Bennett, Sanford A.....	Detroit	Brown, Gordon T.....	Detroit
Ankle, Jerome W.....	Detroit	Bennett, William E.....	Detroit	Brown, Harvey F.....	Detroit
Annessa, Domenico.....	Detroit	Bennett, Zina B.....	Detroit	Brown, John R.....	Detroit
Anslow, Robert E.....	Detroit	Benson, Clifford D.....	Detroit	Brown, Robert A.....	Detroit
Appelman, Howard B.....	Detroit	Benson, Davis A.....	Detroit	Brown, Samuel M.....	Detroit
Archambault, Henry.....	Detroit	Benson, Virginia M.....	Detroit	Brown, Stanley H.....	Detroit
Archart, Burke W.....	Detroit	Bentley, Frederick E.....	Detroit	Brown, Thomas A.....	Detroit
Arent, John G.....	Detroit	Bentley, Neil I.....	Detroit	Brownell, Paul G.....	Detroit
Arminski, Thomas C.....	Detroit	Berge, Clarence A.....	Detroit	Bruer, Edgar S.....	River Rouge
Armstrong, Arthur G.....	Detroit	Bergman, Murray Stewart.....	Detroit	Bruer, Edwin L.....	Lincoln Park
Arnold, Effie.....	Detroit	Bergo, Howard L.....	Detroit	Brunk, Andrew S.....	Detroit
Aronstam, Noah E.....	(E) Detroit	Berke, Sydney S.....	Detroit	Brunk, Clifford F.....	Detroit
Arrington, Robyn J.....	Detroit	Berkey, William E.....	Detroit	Brunke, Bruno B.....	Detroit
Ascher, Meyer S.....	Detroit	Berlien, Ivan C.....	Detroit	Brush, Brock Edwin.....	Detroit
Ashe, Robert M.....	River Rouge	Berman, Lawrence.....	Detroit	Bryan, Donald I.....	Detroit
Ashe, Stilson R.....	Detroit	Berman, Robert.....	Detroit	Bryce, John D.....	Detroit
Ashley, L. Byron.....	Detroit	Berman, Sidney L.....	Detroit	Buchanan, William Paul.....	Detroit
Ashton, F. B.....	(L) Highland Park	Bernard, Walter G.....	Detroit	Budson, Daniel.....	Detroit
Asselin, Regis F.....	Detroit	Bernbaum, Bernard.....	Detroit	Buesser, Frederick G.....	Detroit
Athay, Roland M.....	Eloise	Bernstein, Albert E.....	Detroit	Buller, H. L.....	Detroit
Atler, Lawrence R.....	Detroit	Bernstein, Samuel S.....	Detroit	Burgess, Chas. M.....	Detroit
Atler, Leroy L.....	Detroit	Berry, Jos. E.....	Detroit	Burke, Ralph M.....	Detroit
Auble, Max E.....	Detroit	Besancon, J. H.....	Detroit	Burns, Robert T.....	Detroit
August, Harry E.....	Detroit	Best, T. H. Edward.....	Detroit	Burnstine, Julius Y.....	Detroit
Auld, Douglas V.....	Detroit	Bicknell, Edgar A.....	Detroit	Burnstine, Perry P.....	Detroit
Avrin, Ira.....	Detroit	Bicknell, Frank B.....	Detroit	Burr, George C.....	Detroit
Axelson, A. U.....	Detroit	Billingslea, Thomas.....	Detroit	Burr, H. Leonard.....	Detroit
Babcock, Kenneth B.....	Detroit	Birch, John R.....	Detroit	Burroughs, R. G.....	Detroit
Babcock, Lloyd K.....	Detroit	Bird, H. Waldo.....	Detroit	Burrows, Howard A.....	Dearborn
Babcock, Myra E.....	Detroit	Birmingham, John R.....	Detroit	Burstein, Harry S.....	Detroit
Babcock, Warren W.....	Detroit	Birkelo, Carl C.....	Detroit	Burstein, I. Marvin.....	Detroit
Bach, Walter F.....	Detroit	Birndorf, Leonard.....	Detroit	Burstein, Morris M.....	Detroit
Bachman, Morris E.....	Detroit	Bitter, Isadore Irving.....	Detroit	Burton, D. T.....	Detroit
Bacon, Vinton A.....	Detroit	Bittrich, Norbert M.....	Detroit	Burton, Irving F.....	Detroit
Bader, Benjamin.....	Detroit	Black, Perry S.....	Detroit	Bush, Glendon J.....	Detroit
Baer, George J.....	Detroit	Blain, Alexander W.....	Detroit	Bush, Lowell M.....	Detroit
Baer, Raymond B.....	Detroit	Blain, Alexander W., III.....	Detroit	Butler, Harry J.....	(L) Highland Park
Baef, Michael A.....	Detroit	Blain, James H., Jr.....	Grosse Pointe	Butler, J. Payne.....	Detroit
Bagley, Harry E.....	Dearborn	Blaine, Max.....	Detroit	Butler, Lawrence H.....	Detroit
Bailey, Carl C.....	Detroit	Blashill, James B.....	Detroit	Butler, Volney N.....	Detroit
Bailey, Don A.....	Detroit	Bleier, Alfred.....	Detroit	Butterworth, Herman.....	Lincoln Park
Bailey, Louis J.....	Detroit	Bloch, Abraham.....	Detroit	Buttrum, Edward J.....	Detroit
Baker, Clarence.....	Detroit	Blodgett, William E.....	(L) Detroit	Byers, Dudley W.....	Detroit
Baker, Howard A.....	Detroit	Blodgett, William H.....	Detroit	Byington, Garner M.....	Detroit
Bakst, Joseph.....	Detroit	Blumenthal, Franz L.....	Detroit	Cadieux, Henry W.....	(L) Detroit
Balaga, Frank T.....	Detroit	Boccaccio, John L.....	Detroit	Cahalan, Joseph L.....	Detroit
Balberor, Harry.....	Detroit	Boccia, James J.....	Grosse Pointe Farms	Caldwell, George L.....	Detroit
Balcerski, Matthew A.....	Detroit	Boddie, Arthur W.....	Detroit	Caldwell, I. Ewart.....	Detroit
Ballard, Charles S.....	Detroit	Boell, Arthur F.....	Detroit	Calkins, H. N.....	Detroit
Balver, Charles Wadsworth.....	Detroit	Bogue, Robert E.....	Detroit	Callaghan, Thomas T.....	Detroit
Baltz, James I.....	Detroit	Bogusz, Ladislaus.....	Eloise	Cameron, A. H.....	Wyandotte
Barak, Lewis R.....	Detroit	Bohn, Z. Stephen.....	Detroit	Cameron, Duncan A.....	Detroit
Baranowski, A. W.....	Detroit	Boileau, Thornton I.....	Detroit	Campau, George H.....	Detroit
Barber, Radivoj.....	Detroit	Bolstad, Donald S.....	Detroit	Campbell, Charles A.....	Dearborn
Barneholtz, Benjamin.....	Eloise	Bookmyer, R. H.....	Detroit	Campbell, Darrell A.....	Eloise
Barland, Oscar L.....	Detroit	Rookstein, Abraham M.....	Detroit	Campbell, Duncan.....	Detroit
Barnes, Donald J.....	Detroit	Bornstein, Sidney.....	Detroit	Campbell, Duncan A.....	(E) Detroit
Barnes, Van D.....	Detroit	Bott, Edmund T.....	Wyandotte	Campbell, Kenneth N.....	Detroit
Barnett, Edwin D.....	Detroit	Botvinick, Isadore.....	Detroit	Campbell, Malcolm D.....	Detroit
Barnett, Louis L.....	Detroit	Boutrous, Thomas A.....	Detroit	Campbell, Thelma Wygant.....	Dearborn
Barnett, Morton.....	Detroit	Bovill, Edwin G.....	Detroit	Candler, Clarence L.....	Detroit
Barnett, Saul E.....	Detroit	Bower, Franklin T.....	Detroit	Canter, Allie E.....	Detroit
Barone, Charles J.....	Highland Park	Bowers, Leo J.....	Detroit	Canter, G. E.....	Detroit
Barrett, Clarence D.....	Dearborn	Boyd, John H.....	Trenton	Cantor, Meyer O.....	Detroit
Barrett, Wyman D.....	Detroit	Boyle, Albert J.....	Detroit	Capano, Oreste A.....	Detroit
Barron, William H.....	Detroit	Brachman, David S.....	Detroit	Caputo, Joseph M.....	Dearborn
Bartel, Robert M.....	Dearborn	Bracken, Andrew H.....	Dearborn	Caraway, Jas. E.....	Wayne
Bartemeier, Leo H.....	Detroit	Bradlev, George T.....	Detroit	Carbone, Louis A.....	Detroit
Barton, Joseph R.....	Detroit	Bradshaw, Wm. H.....	Detroit	Carey, Cornelius.....	Detroit



# ROSTER

Carleton, Lawrence H.	Detroit	Cotruro, Louis D.	Detroit	Drews, Robert S.	Detroit
Carlson, Harold W.	Detroit	Cotton, Schuyler O.	Detroit	Drinkhaus, H. I.	Detroit
Carmichael, Edward K.	Detroit	Coulter, William J.	Detroit	Droock, Victor	Detroit
Carnes, Harry E.	Detroit	Courville, Charles J.	Detroit	Dubin, Joseph J.	Detroit
Carp, Joseph	Detroit	Cowan, Wilfrid	Detroit	Dubnov, Aaron	Detroit
Carpenter, C. J.	Wayne	Cowen, Leon B.	Detroit	DuBois, Paul W.	Detroit
Carpenter, Claire H.	Detroit	Cowen, Robert L.	Detroit	Dubpernell, Karl	(E) Detroit
Carpenter, Glenn B.	Detroit	Coyne, Douglas Ruthven	Detroit	Dubpernell, Martin S.	Detroit
Carpenter, William S.	Detroit	Crane, Langdon T.	Detroit	Dubpernell, Robert	East Dearborn
Carr, J. G.	Detroit	Crane, Thomas P.	Dearborn	Dudek, John J.	Detroit
Carroll, Elmer H.	Detroit	Crawford, Albert S.	Detroit	Dundas, E. M.	Detroit
Carroll, Lona B.	Detroit	Cree, Walter J.	(E) Detroit	Dunlap, Henry A.	Detroit
Carrick, Lee	Detroit	Crews, Thomas H.	Detroit	Dunlap, Samson F.	Detroit
Carson, Herman J.	Detroit	Croll, Leo J.	Detroit	Dunn, Cornelius E.	Detroit
Carstens, Henry R.	Detroit	Croll, Maurice	Detroit	Durham, Everett	Dearborn
	Chevy Chase, Maryland	Crook, Charles L.	Highland Park	Durocher, Edmund J.	Ecorse
Carter, John M.	Detroit	Cross, Harold E.	Grosse Pointe Woods	Dwaihy, Paul J.	Detroit
Carter, L. F.	Detroit	Crossen, Henry F.	Detroit	Dwyer, Francis	Detroit
Cashen, Russell M.	Detroit	Croushore, James E.	Detroit	Dziuba, John J.	Detroit
Cassidy, William J.	Detroit	Cruikshank, Alexander	(E) Detroit	Eades, Charles C.	Detroit
Castrop, Charles W.	Dearborn	Culp, Ormond S.	Detroit	Eadie, Gordon A.	Detroit
Catherwood, Albert E.	Detroit	Curhan, Joseph H.	Detroit	Eakins, Frederick J.	Dearborn
Caton, Dorothy F.	Detroit	Curry, Fillmore S.	Detroit	Easterly, Robert L.	Ecorse
Caughy, Edgar H.	Detroit	Curtis, Frank E.	Detroit	Eaton, Crosby D.	Detroit
Caumartin, Fred E.	Detroit	Curtiss, William P.	Detroit	Eder, Samuel J.	Detroit
Cavell, Roscoe W.	Detroit	Cushing, Russell G.	Detroit	Edgar, Irving I.	Detroit
Caven, Hugh J.	Detroit	Cusick, Paul L.	Detroit	Edgar, Russell G.	Detroit
Ceresko, A. R.	Detroit	Dale, Edward C.	Detroit	Edmonds, Gerald W.	Detroit
Chabut, V. George	Northville	Dale, Esther H.	Detroit	Edmonds, W. N.	Detroit
Chall, Henry G.	Detroit	Dale, Mark	Detroit	Edmondson, Robert B.	Detroit
Chapin, Sidney E.	Dearborn	Danforth, James C., Jr.	Grosse Point Woods	Edwards, Gilbert Lloyd	Detroit
Chapman, Aaron L.	Detroit			Eisman, Clarence H.	Detroit
Chapman, Paul T.	Detroit	Danforth, James C.	Detroit	Eldredge, Edward F.	Detroit
Chapnick, H. A.	Detroit	Danforth, Mortimer E.	Detroit	Ellias, Elmer P.	Dearborn
Charleston, R. A.	Detroit	Darling, Milton A.	Detroit	Elliott, William G.	Detroit
Charnas, Sidney	Detroit	Darpin, Peter H.	Detroit	Elman, Meyer J.	Detroit
Chase, Clyde H.	Detroit	Davidson, Harry O.	Detroit	Elvidge, Robert J.	Detroit
Chatel, Arthur N.	Detroit	Davies, Robert H.	Detroit	Emmert, Herman C.	(L) Detroit
Chesluk, Herman M.	Detroit	Davies, Thomas S.	Grosse Pointe	Engel, Earl H.	Wyandotte
Chester, William P.	Detroit	Davies, Windsor S.	Detroit	English, Leo Victor	Detroit
Childs, George M.	Detroit	Davis, Egbert F.	(L) Detroit	Eno, Laurel S.	Detroit
Chipman, Willard A.	Detroit	Davison, Leo E.	Detroit	Ensign, Dwight C.	Detroit
Chittenden, George E.	Detroit	Dawson, Ralph	Detroit	Ensing, Osborn	Detroit
Chostner, G. C.	Detroit	Dawson, W. A.	Inkster	Epstein, S. G.	Detroit
Christensen, C. A.	Dearborn	Day, Andrew J.	Detroit	Erickson, Eldon W.	Detroit
Christopher, James G.	Detroit	Day, J. Claude	Detroit	Erickson, Milton H.	Phoenix, Ariz.
Chrouch, Laurence A.	Detroit	Deering, Robert J.	River Rouge	Erkfitz, Arthur W.	Detroit
Church, Aloysius S.	Detroit	Defever, Cyril R.	Detroit	Eschbach, Jos. W.	Dearborn
Cioffari, Mario S.	Detroit	Defnet, William A.	Detroit	Estabrook, Bert U.	Detroit
Ciprian, Joseph E.	Detroit	DeJongh, Edwin	Detroit	Ettinger, Clayton J.	Detroit
Clapper, Muir	Detroit	Delaini, Stella	Detroit	Evans, Jos. M.	Detroit
Clark, Charles J.	Dearborn	Delaney, James	Detroit	Evans, Leland S.	Redford
Clark, Clarence M.	Detroit	Demaray, John F.	Detroit	Evans, William A., Jr.	Detroit
Clark, Donald V.	Detroit	Dempster, James H.	(L) Detroit	Evison, Emerson	Detroit
Clark, Edward C.	Detroit	DeNike, A. James	Detroit	Ewing, C. H.	Detroit
Clark, George E.	(E) Detroit	Denham, Ralph M.	Detroit	Eyres, Albert E.	Grosse Pointe
Clark, Harold E.	Detroit	Dennis, M. S.	Dearborn	Fagin, Irvin Donald	Detroit
Clark, Harry G.	Detroit	Denis, George M.	Detroit	Fair, Baxter B.	Detroit
Clark, Ronald E.	Detroit	Denison, Louis L.	Detroit	Falick, Mordecai Louis	Detroit
Clarke, Norman E.	Detroit	DePonio, Sylvester A.	Detroit	Falk, Ira E.	Detroit
Clifford, C. H.	Detroit	Derez, Alphonse R.	Detroit	Fallis, Lawrence S.	Detroit
Clifford, John E.	Detroit	Derleth, Paul E.	Ferdale	Fandrich, Theodore	Detroit
Clifford, Thomas P.	Detroit	DeRosier, Joseph L.	Detroit	Farbman, Aaron A.	Detroit
Coan, Glenn L.	Wyandotte	DeSmyter, George C.	Detroit	Faunce, Sherman P.	Detroit
Coates, Carl Amos	Dearborn	De Spelder, Ray E.	Detroit	Felcyn, W. George	Detroit
Cobane, John H.	Detroit	DeTomas, Rome Q.	Detroit	Feld, David	Detroit
Cochrane, Edgar G.	Detroit	Devine, Herbert W.	Detroit	Feldkamp, Lee E.	Detroit
Cohen, H. Herbert	Detroit	Dibble, Harry F.	Detroit	Feldman, N. L.	Detroit
Cohn, Daniel E.	Detroit	Dickson, Leon A.	Detroit	Feldstein, Martin Z.	Detroit
Cohoe, Don A.	Detroit	Dickson, B. R.	Detroit	Fellers, Ray L.	Detroit
Cole, Fred H.	Detroit	Dickson, Elias L.	Detroit	Fenech, Harold B.	Detroit
Cole, James E.	Detroit	Diebel, Nelson W.	Detroit	Fenner, William G.	Detroit
Cole, Wyman C. C.	Detroit	Dill, Hugh L.	Detroit	Fenton, Edwin H.	Detroit
Coleman, Margaret	Detroit	Dill, J. Lewis	Detroit	Fenton, Meryl M.	Detroit
Coleman, William G.	Redford	DiLoreto, Panfilo C.	Detroit	Fenton, Russell F.	Detroit
Coll, Howard R.	Detroit	Dinnen, William	Detroit	Fenton, Stanley C.	Detroit
Collins, James D.	Detroit	Dittmer, Edwin F.	Detroit	Ferrera, Louis V.	Detroit
Collins, James E.	Detroit	Dixon, Fred W.	Dearborn	Ferrara, Virginia M.	Detroit
Colvin, Leslie T.	Detroit	Dixon, Ray S.	Detroit	Fettig, Carl A.	(L) Detroit
Colyer, Raymond G.	Detroit	Dixon, Robert K.	Detroit	Finch, Alvis D.	Detroit
Comfort, Milton D.	Flat Rock	Dodds, John C.	Detroit	Finch, F. Sinclair	Detroit
Comstock, Lawrence A.	Trenton	Dodenhoff, Chas. F.	Detroit	Fine, Edward	Detroit
Condon, Stanley	Detroit	Dodril, F. D.	Detroit	Finkelstein, M. B.	Detroit
Conley, L. C. M.	Detroit	Doering, Wendell	Detroit	Fischer, Frederick J.	Detroit
Conn, Harold C.	Detroit	Doerr, Louis Jr.	Detroit	Fisher, George S.	Detroit
Connolly, Richard C.	Detroit	Dolega, Stanley F.	Detroit	Fisher, James M.	Grosse Pointe
Conner, Edward D.	Detroit	Dolman, E. Nesbitt	Detroit	Fisher, O. O.	Detroit
Connolly, Frank	Detroit	Domzalski, Casimer A.	Detroit	Fisher, Ralph	Detroit
Connolly, John P.	Detroit	Donald, Douglas	Detroit	Fitzgerald, James M.	Detroit
Connolly, Paul J.	Detroit	Donovan, Daniel R., Jr.	Detroit	Flaherty, H. J.	Detroit
Connors, J. J.	Detroit	Donovan, Richard S.	Detroit	Flaherty, Norman W.	River Rouge
Conrad, Elmer R.	Detroit	Dorman, Jack	Detroit	Fleming, L. N.	Detroit
Constable, Canute G.	Detroit	Dorsey, John M.	Highland Park	Flora, William Robert	Detroit
Cook, James C.	Detroit	Doty, Chester A.	Detroit	Flower, J. A.	Detroit
Cook, James H.	Wyandotte	Doub, Howard P.	Detroit	Fogt, Herbert E.	Detroit
Cooksey, Warren B.	Detroit	Douglas, Bruce H.	Detroit	Fogt, Robert G.	Detroit
Cooldige, M. Belle	(L) Grosse Pointe Park	Douglas, Clair L.	Detroit	Foley, Hugh S.	Dearborn
		Dovitz, Beni J.	Detroit	Foley, Joseph M.	Detroit
Cooper, Benjamin J.	Detroit	Dow, Roy E.	Detroit	Font, Anthony J.	Detroit
Cooper, Edmond L.	Detroit	Dowdle, Edward	Detroit	Foote, James A.	Lincoln Park
Cooper, James B.	Detroit	Downer, Ira G.	Detroit	Ford, George A.	Detroit
Cooper, Ralph Ruehl	Detroit	Downes, George O.	Detroit	Ford, Sylvester	(L) Detroit
Corbeille, Catherine	Detroit	Doyle, George H.	Detroit	Ford, Walter D.	Lincoln Park
Cosaglia, Robert P.	Detroit	Drake, Ellet H.	Detroit	Fordell, F. S.	Detroit
Cosgrove, William J.	Detroit	Drake, James J.	Detroit	Forsythe, John R.	Detroit
Costello, Russell T.	Detroit	Draves, Edward F.	Detroit	Foster, Daniel P.	Detroit



# ROSTER

Foster, E. Bruce.....Detroit  
Foster, Linus J.....Detroit  
Foster, Owen C.....Detroit  
Foster, William L.....Detroit  
Foster, Wallace M.....Detroit  
Fowler, Melvin E.....Detroit  
Fox, Morris Edward.....Detroit  
Fraiberg, Paul L.....Detroit  
Franjac, M. J.....Dearborn  
Franklin, John F.....Detroit  
Franzen, Nils A.....Detroit  
Frazier, Mary Margaret.....Detroit  
Free, Harry W.....Detroit  
Freedman, John.....Detroit  
Freedman, Milton.....Detroit  
Freeman, B. F.....Detroit  
Freeman, D. K.....Detroit  
Freeman, Mabel.....Detroit  
Freeman, Michael W.....Detroit  
Freeman, Thelma.....Detroit  
Freeman, Wilmer.....Detroit  
Freid, Samuel.....Detroit  
Freier, Morton L.....Detroit  
Fremont, Joseph C.....Detroit  
Freund, Hugo A.....Detroit  
Friedlaender, Alex S.....Detroit  
Friedlaender, Sidney.....Detroit  
Friedman, David.....Detroit  
Friedman, I. H.....Detroit  
Froelicher, Emil L.....Detroit  
Frothingham, George E.....(E) Detroit  
Fryogle, James D.....Detroit  
Fulgenzi, Andrew A.....Detroit  
Fuller, Hugh M.....Detroit  
Fulton, William James.....Detroit  
Fullenwider, Allan C.....Detroit  
Gaba, Howard.....Detroit  
Gaberman, David B.....Detroit  
Gaffney, J. Mitchell.....Detroit  
Galantowicz, Henry C.....Detroit  
Galdonyi Laslo.....Detroit  
Galdonyi, Nicholas.....Detroit  
Galerneau, D. B.....Center Line  
Gannan, Arthur M.....Detroit  
Ganschow, John H.....Detroit  
Gardner, Lawrence W.....Detroit  
Garipey, Louis J.....Detroit  
Gaston, Herbert B.....Detroit  
Gates, Nathaniel H.....Detroit  
Gaydos, Leonard M.....Detroit  
Gaynor, Alex.....Detroit  
Gehring, Harold W.....Detroit  
Geib, Ledru O.....Detroit  
Geitz, William A.....Detroit  
Gelbach, Philip D.....Detroit  
Gellert, I. S.....Detroit  
Gemeroy, J. C.....Detroit  
Gerondale, Edmond J.....Detroit  
Giese, Fred W.....Detroit  
Gigante, Nicola.....Detroit  
Gilbert, Harold R.....Wyandotte  
Gillespie, Stephen M.....Dearborn  
Gillman, R. W.....(E) Detroit  
Ginsberg, Harold I.....Detroit  
Gitlin, Charles.....Detroit  
Gitlin, Julius R.....Detroit  
Gittins, Perry C.....Detroit  
Glasgow, Gordon K.....Detroit  
Glassman, Samuel.....Detroit  
Glazer, Walter S.....Detroit  
Gleason, John E.....(L) Detroit  
Glees, John L.....Detroit  
Glemet, Raymond B.....Detroit  
Glowacki, B. F.....Detroit  
Gmeiner, Clarence C.....Detroit  
Goerke, Elmer A.....Romulus  
Goetz, Angus G.....Detroit  
Goins, William F.....Detroit  
Goldberg, Harry H.....Detroit  
Goldberg, Nathan.....Detroit  
Goldin, M. I.....Eloise  
Goldman, Abe A.....Detroit  
Goldman, Aubrey.....Detroit  
Goldman, Perry.....Detroit  
Goldstein, Abe S.....Detroit  
Goldstone, R. R.....Detroit  
Goldberg, Arthur.....Detroit  
Gollman, Maurice D.....Detroit  
Gonne, William S.....Detroit  
Goodrich, Benjamin E.....Detroit  
Gordon, John W.....(R) Detroit  
Gordon, William H.....Detroit  
Gorelick, Martin J.....Dearborn  
Gorning, Raymond P.....Detroit  
Goryl, Stephen V.....Detroit  
Goss, Samuel B.....Detroit  
Gostine, Edmond.....Detroit  
Gottschalk, Fred W.....Detroit  
Gould, J. Emanuel.....Eloise  
Gourley, Eugene V.....Detroit  
Goux, Raymond S.....Detroit  
Grace, Joseph M.....Detroit  
Graff, J. M.....Detroit  
Graham, John G., Jr.....Detroit  
Graham, Julius A.....Detroit  
Grain, Gerald O.....Detroit

Grajewski, Leo E.....Detroit  
Gramley, William.....Detroit  
Granger, Francis L.....Detroit  
Grant, Heman E.....(L) Detroit  
Gratton, Henri L.....Detroit  
Gravelle, Lawrence J.....Detroit  
Gray, Jacques Pierce.....Detroit  
Greek, Louis M.....Detroit  
Green, Ellis R.....Detroit  
Green, Lewis.....Detroit  
Green, Louis M.....Detroit  
Green, Nelson W.....Detroit  
Green, Simpson W.....Detroit  
Greenberg, Jack R.....Detroit  
Greenberg, Julius J.....Detroit  
Greenberg, Morris Z.....Detroit  
Greene, John B.....Detroit  
Greenidge, Robert.....Detroit  
Greenlee, William Tate.....Detroit  
Greiner, Bert A.....Detroit  
Grekin, John N.....Detroit  
Grekin, Samuel L.....Detroit  
Griffith, A. J.....Detroit  
Griffiths, Sidney.....Detroit  
Grillo, S. Phillip.....Belleville  
Grimaldi, Gregory J.....Detroit  
Grinstein, Alexander.....Detroit  
Grob, Otto.....Detroit  
Grossman, Sol.....Detroit  
Grotz, Genevieve A.....Eloise  
Gruber, Thomas K.....Eloise  
Guerrero, Jose.....Detroit  
Guimaraes, A. S.....Dearborn  
Gullickson, Niles J.....Dearborn  
Gurdjian, E. S.....Detroit  
Gurski, Eugenia.....Detroit  
Guterman, Meyer A.....Detroit  
Haefele, Leslie P.....Garden City  
Haig, D. B.....Detroit  
Haking, Leonard.....Detroit  
Hale, Arthur S.....Detroit  
Hall, E. Walter.....Detroit  
Hall, Ralph E.....Detroit  
Hall, Robert J.....Detroit  
Hall, Winthrop D.....Dearborn  
Hallen, Leonard.....Detroit  
H'Amada, Norman K.....Detroit  
Hamburger, A. C.....Detroit  
Hamil, Brenton M.....Detroit  
Hamilton, Norman C.....Detroit  
Hamilton, William.....Detroit  
Hamilton, William F.....(L) Detroit  
Hammer, Edwin J.....Detroit  
Hammond, Arthur E.....Detroit  
Hammond, James L.....Inkster  
Hand, Fordus V.....Detroit  
Hanna, Carl.....Detroit  
Hansen, Frederick E.....Detroit  
Hanser, Joshua.....(L) Detroit  
Hardstaff, R. John.....Detroit  
Hardy, George C.....Detroit  
Hareluk, E. W.....Detroit  
Harkaway, Roman.....Detroit  
Harley, Garth H.....Dearborn  
Harley, Louis M.....Detroit  
Harm, Winfred B.....Detroit  
Harper, Jesse T.....Detroit  
Harris, Harold H.....Detroit  
Harris, Ivor David.....Detroit  
Harrison, Hugh.....(E) Detroit  
Harrison, Wesley, Jr.....Detroit  
Hart, Charles E.....Detroit  
Hart, John Clarence.....Detroit  
Hartkopf, Henry H.....Detroit  
Hartman, F. W.....Detroit  
Hartmann, Waldemar B.....Detroit  
Hartquist, Robert J.....Wyandotte  
Hartzell, John B.....Detroit  
Hasley, Clyde K.....Detroit  
Hasley, Daniel E.....Detroit  
Hassig, Walter W.....Grosse Pointe Farms  
Hastings, Orville J.....Detroit  
Hause, Glen E.....Detroit  
Hauser, I. Jerome.....Detroit  
Hauser, John E.....Detroit  
Hauser, Maurice J.....Detroit  
Havers, Howard.....Detroit  
Hawkins, James W.....Detroit  
Hayes, Joseph D.....Detroit  
Heath, Leonard P.....Detroit  
Heavner, Lyle E.....Detroit  
Hecht, Manes S.....Detroit  
Hedges, Frank W.....Detroit  
Heenan, Theophilus H.....Detroit  
Heideman, Louis E.....Detroit  
Heldt, Thomas J.....Detroit  
Hendelman, Manuel H.....Detroit  
Henderson, Allison B.....Detroit  
Henderson, Arthur B.....Detroit  
Henderson, Charles W.....Detroit  
Henderson, Harold.....Detroit  
Henderson, J. L.....Detroit  
Henderson, John C.....Detroit  
Henderson, Leslie T.....Detroit  
Henderson, William E.....Detroit  
Henig, Fred N.....Detroit

Henrich, Lawrence E.....Detroit  
Herbst, Harold B.....Detroit  
Herkimer, Dan R.....Lincoln Park  
Herrold, Rose E.....Detroit  
Herschmann, Roy F.....Detroit  
Hessler, Harvey W.....Detroit  
Hewitt, Leland V.....Detroit  
Hewitt, Robert S.....Dearborn  
Heyner, Stanley A.....Detroit  
Hickey, Joseph.....Detroit  
Hicks, Fred G.....Dearborn  
Higbee, Arthur L.....Detroit  
Hileman, S. Lee.....Ecorse  
Hill, W. T.....Detroit  
Hillenbrand, Alfred E.....Detroit  
Hiller, Glenn I.....Highland Park  
Hilton, Wm. E.....Detroit  
Hinko, Edward N.....Eloise  
Hirschfield, Alexander H.....Detroit  
Hirschman, Louis J.....(L) Detroit  
Hoagland, Thomas V.....Detroit  
Hochman, Morton M.....Detroit  
Hodges, Jason.....Detroit  
Hodges, Roy W.....Atlanta  
Hodgkinson, C. P.....Detroit  
Hodoski, Frank J.....Detroit  
Hoffman, E. S.....Detroit  
Hoffman, Edward A.....Dearborn  
Hoffman, Harry Y.....Detroit  
Hoffman, Henry A.....Detroit  
Hoffman, Martin H.....Detroit  
Holcomb, August A.....Northville  
Holcomb, Clayton E.....Detroit  
Hollander, A. J.....Detroit  
Hollis, Henry B.....Detroit  
Holman, Herbert H.....Detroit  
Holmes, Alfred W.....Detroit  
Holt, Henry T.....Detroit  
Honhart, Fred L.....Detroit  
Honor, William H.....Wyandotte  
Hookey, John A.....Wyandotte  
Hooper, Norman L.....Detroit  
Hoops, George B.....Detroit  
Hopkins, J. E.....Detroit  
Horan, Thomas N.....Detroit  
Horkins, Harold A.....Detroit  
Horny, Hugo.....Grosse Pointe  
Horton, Reese H.....Detroit  
Horvath, Louis O.....Detroit  
Horwitz, John B.....Detroit  
Hotchkiss, Loris M.....Farmington  
Howard, Austin Z.....Detroit  
Howard, Philip J.....Detroit  
Howard, W. L.....Northville  
Howell, Bert F.....Detroit  
Howes, Homer A.....Detroit  
Howes, Willard Boyden.....Detroit  
Howlett, Howard T.....Detroit  
Hromadko, Louis.....Detroit  
Hubbard, John P.....Detroit  
Hubbard, Ralph G.....Detroit  
Hudson, J. Stewart.....Grosse Pointe  
Hudson, William A.....Detroit  
Huegli, Wilfred A.....Detroit  
Huff, Reginald G.....Wayne  
Hull, LeRoy W.....Detroit  
Huminski, T. S.....Detroit  
Hunt, T. H.....Detroit  
Hunt, Verne G.....Detroit  
Hunter, Basil H.....Detroit  
Hunter, Elmer N.....Detroit  
Husband, Chas. W.....Detroit  
Hussey, Raymond.....Detroit  
Hyatt, Jarvis M.....Dearborn  
Hyde, Frederick W., Jr.....Detroit  
Hyde, Frederick W.....Detroit  
Hyland, John.....Detroit  
Hyman, Samuel J.....Inkster  
Jacobell, Peter H.....Detroit  
Igna, Eli J.....Detroit  
Ignatius, Aram A.....Detroit  
Insley, Stanley.....Marine City  
Irvine, Earle Albert.....Detroit  
Irwin, William A.....Detroit  
Israel, Barney B.....Detroit  
Israel, Joseph G.....Detroit  
Ivkovich, Peter.....Detroit  
Iwata, Herbert T.....Detroit  
Jacobson, Samuel D.....Detroit  
Jacoby, Myron D.....Detroit  
Jaeger, Julius P.....(L) Detroit  
Jaekel, C. N.....Detroit  
Jaffar, Donald J.....Detroit  
Jaffe, J. L.....Detroit  
Jaffe, Jacob.....Detroit  
Jaffe, Louis.....Detroit  
Jahsman, William E.....Detroit  
Jamieson, Thomas J.....Lincoln Park  
Janicki, Natalia J.....Eloise  
Jarre, Hans A.....Detroit  
Jarvis, Harold F.....Detroit  
Jarsen, Frank J.....Dearborn  
Jason, Lawrence.....Detroit  
Jend, William James.....(L) Detroit  
Jenkins, E. A.....Detroit  
Jennings, Charles G.....Detroit



# ROSTER

Jennings, Elmer R.	Detroit	Knox, Ross M.	Ecorse	Levitt, Nathan	Detroit
Jentgen, Chas. J.	Detroit	Koch, Donald A.	Detroit	Levy, Marvin B.	Detroit
Jentgen, L. G.	Detroit	Koch, John C.	Detroit	Lewis, Charles T.	Detroit
Jeremias, Robert C.	Detroit	Koebel, R. H.	Detroit	Lewis, J. Hugh	Wyandotte
Jewell, F. C.	Detroit	Koerber, Edward J.	Detroit	Lewis, L. A.	Detroit
Jocz, M. W.	Grosse Pointe Park	Koessler, George L.	Detroit	Lewis, Wilfred John	Detroit
Jodar, E. O.	Detroit	Kogut, C. S.	Detroit	Libbrecht, Robert V.	Dearborn
John, Hubert R.	Detroit	Kokowicz, Raymond J.	Detroit	Lichter, M. L.	Melvindale
Johnson, Homer L.	Detroit	Kolasa, Wm. B.	Detroit	Lichtwardt, Hartman A.	Detroit
Johnson, Ralph A.	Detroit	Kopel, Joseph O.	Detroit	Liddicoat, A. G.	Detroit
Johnson, Thomas	Detroit	Korby, George J.	Detroit	Lieberman, B. L.	Detroit
Johnson, Vernon P.	Detroit	Koren, Louis	Eloise	Lightbody, James J.	Detroit
Johnson, Vincent C.	Detroit	Korum, Lyle W.	Detroit	Lignell, Rudolph W.	Detroit
Johnson, W. H. M.	Detroit	Kossayda, Adam W.	Detroit	Lilly, Charles J.	Detroit
Johnston, Charles G.	Detroit	Koster, Koert	Detroit	Linkner, Leonard	Detroit
Johnston, Everett V.	Detroit	Kovach, Emery P.	Detroit	Linton, James R.	Eloise
Johnston, Joseph A.	Detroit	Kovan, Dennis D.	Detroit	Lipinski, Stanley L.	Detroit
Johnston, John L.	Detroit	Koven, Abraham	Detroit	Lipkin, Ezra	Detroit
Johnston, William E.	Detroit	Kozlinski, Anthony E.	Detroit	Lipton, Raymond F.	Detroit
Johnstone, B. I.	Detroit	Kozlow, Louise E. Ange	Detroit	Lipschutz, Louis	Detroit
Joinville, E. V.	Detroit	Kraft, Raymond B.	Detroit	Litsky, Abraham	Detroit
Jones, Arthur J.	Detroit	Kraft, Ruth M.	Detroit	Littlejohn, David	Dearborn
Jones, Adrian R.	Detroit	Krass, Edward W.	Detroit	Lockwood, Bruce C.	Detroit
Jones, Edna M.	Northville	Kraus, John J.	Detroit	Lofstrom, James E.	Detroit
Jones, L. Faunt	Detroit	Krebs, William T.	Detroit	Long, Earle C.	Detroit
Jones, Roy D.	Detroit	Kreinbring, George E.	Detroit	Long, John J.	Detroit
Jordan, R. Gerald	Detroit	Kretschmar, John C.	Detroit	Longo, Salvatore	Detroit
Joyce, Stanley J.	Detroit	Krieg, Earl G.	Detroit	Longyear, Harold W.	Detroit
Juliar, Benjamin	Detroit	Krieger, Harley L.	Detroit	Lookanoff, V. A.	Detroit
Jurow, Harry N.	Detroit	Kritchman, M. J.	Detroit	Loranger, C. B.	Detroit
Kalayjian, Bernard S.	Detroit	Kroha, Lawrence A.	Detroit	Loranger, Guy L.	Dearborn
Kalder, Ned Block	Detroit	Krohn, Albert H.	Detroit	Lorber, Joseph H.	Detroit
Kallett, Herbert I.	Detroit	Krohn, Bernard	Detroit	Lorentzen, Edwin H.	Detroit
Kallman, David	Detroit	Krvnicki, Francis X.	Detroit	Lovas, William S.	Detroit
Kallman, Leo	Detroit	Kubaneck, Joseph L.	Dearborn	Love, W. Thomas	Detroit
Kallman, R. Robert	Detroit	Kucmierz, Francis S.	Detroit	Lowe, Adolf W.	Detroit
Kamin, Louis E.	Detroit	Kuhn, Albert Arthur	Detroit	Lowe, Townsend	Detroit
Kaminski, Zeno L.	Detroit	Kuhn, Richard F.	Detroit	Lowrie, William L., Jr.	Detroit
Kamperman, George A.	Detroit	Kulaski, Chester H.	Detroit	Lowry, George L.	Detroit
Kanter, Herman	Detroit	Kullman, Harold J.	Dearborn	Lublin, Ann	Detroit
Kapetansky, A. J.	Detroit	Kurcz, Joseph A.	Detroit	Luce, Henry A.	Detroit
Kapetansky, N. J.	Detroit	Kurtz, Harry C.	Detroit	Lukas, John R.	Detroit
Kaplita, Walter A.	Hamtramck	Kurtz, I. J.	Detroit	Lutz, Earl F.	Detroit
Karr, Herbert S.	Detroit	Kwasiborski, Stanley A.	Wyandotte	Lynn, David H.	Detroit
Kasabach, Harry	Detroit	LaBerge, James M.	Wyandotte	Lynn, Harvey D.	Detroit
Kasabach, V. Y.	Detroit	LaBine, Alfred C.	Detroit	Lyons, L. Mason	Detroit
Kasper, Joseph A.	Detroit	La Ferte, Alfred D.	Detroit	Lyons, William Harrington	Detroit
Kass, Arnold	Detroit	Lakoff, Charles	Detroit	Lytle, Robert P.	Detroit
Kass, J. B.	Detroit	Lam, Conrad R.	Detroit	Maben, Hayward C., Jr.	Detroit
Katzman, I. S.	Detroit	Lamberson, Frank A.	Detroit	Mabley, J. Donald	Detroit
Kaump, Donald H.	Detroit	LaMarche, Norman O.	Detroit	MacArthur, Robert A.	Detroit
Kauppinen, J. A.	Detroit	Lammy, James V.	Detroit	MacCracken, Frances L.	Detroit
Kawecki, Lucian	Dearborn	Lamman, H. H.	Detroit	MacDougall, O. P.	Detroit
Kay, Edward W.	Hamtramck	Landers, Maurice B., Sr.	Detroit	MacFarlane, Howard W.	Detroit
Kazdan, Louis L.	Detroit	Lang, Ernest Frederick	Detroit	MacGregor, William W.	Detroit
Kazdan, Morris A.	Allen Park	Lang, Leonard W.	Detroit	Mack, Harold C.	Detroit
Keane, William E.	Detroit	Lange, Anthony H.	Detroit	MacKenzie, Earle D.	Detroit
Keating, Thomas F.	Detroit	Lange, William A.	Detroit	MacKenzie, Edward P.	Detroit
Kehee, Henry J.	Detroit	Laning, George M.	Detroit	MacKenzie, Frank M.	Detroit
Keim, H. L.	Detroit	Langston, Hirm	Detroit	Mackenzie, John W.	Grosse Pointe
Keith, Kelly	Detroit	Lansky, Mendell	Detroit	Mackersie, W. G.	Detroit
Kelly, Frank James	Detroit	Lapham, Fred E.	Detroit	MacMillan, Francis B.	Detroit
Kelmenson, Victor A.	Detroit	Large, A. M.	Detroit	MacMullen, Frank B.	Detroit
Kelton, Malcolm J.	Detroit	Laschak, Andrew G.	Detroit	MacPherson, K. C.	Detroit
Kemler, Walter J.	Ecorse	Lasier, James William	Detroit	MacQueen, Malcolm D.	Detroit
Kennary, James M.	Detroit	Lathrop, Philip L.	Detroit	Maczewski, John E.	Detroit
Kennedy, Chas. S.	Detroit	Lauppe, Edward H.	Detroit	Madsen, Martha	Royal Oak
Kennedy, Donald J.	Detroit	Lauppe, Frederick A.	Detroit	Magnell, Ralph C.	Detroit
Kennedy, Robert B.	Detroit	Latteier, Karl K.	Detroit	Maguire, Clarence E.	Detroit
Kennedy, William Y.	Detroit	Laurisin, Eugene	Detroit	Mahoney, Hugh M.	Detroit
Kenning, John C.	Detroit	Lazar, Morton R.	Detroit	Maibauer, Frederick P.	Wyandotte
(A) Beverly Hills, Calif.		Leach, David	Detroit	Maino, Linus J.	Detroit
Kern, Wheeler H.	Garden City	Leacock, Robert C.	Detroit	Maire, Edward D.	Grosse Pointe
Kernkamp, Ralph F.	Detroit	Leader, Luther R.	Detroit	Mair, Harold U.	Detroit
Kernick, Melvin O.	Detroit	Leaver, L. Ross	Detroit	Malachowski, B. T.	Detroit
Kersten, Armand G.	Detroit	Jeckie, George C.	Detroit	Malik, Edward A.	Detroit
Kersten, Werner	Detroit	Ledwidge, Patrick L.	Detroit	Malik, Nur M.	Detroit
Kerzman, Joseph H.	Detroit	Lee, Harry E.	Detroit	Malina, Stephen	Detroit
Keshishian, Sarkis K.	Detroit	LeGallee, George M.	Detroit	Malone, Richard	Detroit
Keyes, Eugene C.	Dearborn	Leibinger, H. R.	Detroit	Maloney, John A.	Detroit
Keyes, John W.	Detroit	Leinsitz, Louis S.	Detroit	Maltzer, Joseph H.	Detroit
Kibzey, Ambrose T.	Pontiac	Leiser, Rudolf	Eloise	Mancuso, Vincent S.	Detroit
Kidner, Frederick C.	Detroit	Leithausen, Daniel J.	Detroit	Mandiberg, Jack N.	Detroit
Killins, Charles G.	Detroit	Leland, Sol	Detroit	Manning, Morey H.	Detroit
Kimberlin, Kenneth K.	Detroit	Lemak, Noreen A.	Detroit	Maples, Douglas E.	Detroit
King, Edward D.	Detroit	Lemley, Clark	Detroit	Mapletoft, Kenneth E.	Detroit
King, Melbourne J.	Detroit	Lemmon, Charles F.	Detroit	Marcotte, Oliver	Detroit
Kingswood, Roy C.	Detroit	Lemmon, Clarence W.	River Rouge	Marcus, Daniel B.	Detroit
Kinslev, George	Detroit	Lentine, James J.	Detroit	Marinus, Carleton J.	Detroit
Kirchner, Augustus	Detroit	Lenz, Willard R.	Grosse Pointe	Mark, Jerome	Detroit
Kirschbaum, Harry M.	Detroit	Lepard, C. W.	Detroit	Markev, Alexander	Dearborn
Kitzmiller, John L.	Detroit	Lepley, Fred O.	Detroit	Markoe, Rupert C. L.	Detroit
Klebbba, Paul	Detroit	Lerman, S. F.	Detroit	Marks, Ben	Detroit
Klein, Alfred	Detroit	Leschier, Alex W.	Detroit	Marks, Morris	Detroit
Klein, Howard A.	Detroit	L'Esperance, Simon P.	Detroit	Marsh, Alton R.	Detroit
Klein, Sander P.	Chicago, Ill.	Leszynski, I. S.	Detroit	Marsden, Thomas B.	Detroit
Klein, William	Detroit	Leucutia, Traian	Detroit	Marshall, James R.	Detroit
Kliger, David	Detroit	Levagood, Floyd	Detroit	Martin, Edward G.	Detroit
Kline, Starr L.	Detroit	Levant, Arthur B.	Detroit	Martin, Elbert A.	Detroit
Klippen, Arthur J.	Dearborn	Levin, David M.	Detroit	Martin, I. Herbert	Detroit
Knaggs, Charles W.	(L) Grosse Pointe	Levin, Michael M.	Detroit	Martin, J. B., Jr.	Detroit
Knaggs, Earl J.	Wyandotte	Levin, Samuel J.	Detroit	Martin, L. R.	Detroit
Knapp, Byron S.	River Rouge	Levine, Edward E.	Dearborn	Martin, Peter A.	Detroit
Knapp, Floyd B.	Detroit	Levine, Sidney S.	Detroit	Martin, Robert M.	Detroit
Knobloch, Edmund J.	Detroit	Levitt, Edward J.	Detroit	Martin, Wilbur C.	Detroit
Knoch, Hubert S.	Detroit	Levitt, Irving	Detroit	Martinez, Pedro O.	Detroit



# ROSTER

Martmer, Edgar E.....	Detroit	Morand, Louis J.....	Detroit	Paterson, Walter G.....	(L) Detroit
Marwil, Thomas B.....	Detroit	Morgan, Donald N.....	Detroit	Pawlowski, Jerome.....	Detroit
Mason, Percy W.....	Detroit	Morell, Clarence J.....	Detroit	Paysner, Harry A.....	Detroit
Mateer, John G.....	Detroit	Moriarty, George.....	Detroit	Peabody, Charles W.....	Lake Odessa
Mathes, Charles J.....	Detroit	Morin, John B.....	(L) Detroit	Peacock, Lee W.....	Highland Park
Mattes, Max W.....	Detroit	Moritz, H. C.....	Detroit	Pearman, Charles L. R.....	Detroit
Mattman, Paul E.....	Detroit	Morley, Harold V.....	Detroit	Pearse, Harry A.....	Detroit
Maun, Mark E.....	Detroit	Morley, James A.....	Detroit	Peggs, George F.....	Detroit
Maxwell, J. Harvey.....	Detroit	Moroun, S. J.....	Detroit	Penberthy, G. C.....	Detroit
May, Frederick T., Jr.....	Detroit	Morris, Harold L.....	Detroit	Pendy, John M.....	Detroit
Mayer, E. V.....	Detroit	Morse, Plinn F.....	Detroit	Pensler, Leslie.....	Detroit
Mayer, Willard D.....	Detroit	Morton, David.....	Detroit	Pensler, Meyer.....	Detroit
Maynard, Fred M.....	Allen Park	Morton, John B.....	(E) Detroit	Pequegot, Charles F.....	(L) Detroit
Mayne, Cecil H.....	Detroit	Mosen, Max M.....	Detroit	Perdue, Grace M.....	Detroit
McAfee, F. W.....	Detroit	Moss, Erwin B.....	Detroit	Perkins, Frank S.....	Detroit
McAlonan, William T.....	Detroit	Moss, Nathan H.....	Detroit	Perlis, H. L.....	Detroit
McAlpine, Gordon S.....	Detroit	Moss, Selma S.....	Detroit	Peterman, Earl A.....	Highland Park
McBroom, Russell E.....	Detroit	Mossman, John D.....	Detroit	Petix, Samuel C.....	Detroit
McCadie, James.....	Detroit	Mott, Carlin P.....	Detroit	Pfeiffer, Rudolph L.....	Detroit
McCain, French H.....	Detroit	Moulton, Charles W.....	Detroit	Piccone, Louisa.....	East Dearborn
McClelland, Rachel.....	Detroit	Mullenhagen, Walter J.....	Detroit	Pichette, J. Walton.....	Detroit
McClellan, Robert J.....	Detroit	Munson, F. T.....	Detroit	Pickard, Orlando W.....	Detroit
McClellan, Robert J., II.....	Detroit	Munson, Henry T.....	Detroit	Pierce, Frank L.....	Detroit
McClendon, James J.....	Detroit	Murphy, D. J.....	Detroit	Pierson, Max J.....	Detroit
McClintock, J. J.....	Detroit	Murphy, Eugene.....	Detroit	Pietraszewski, A. W.....	Detroit
McClure, Robert W.....	Detroit	Murphy, John M.....	Detroit	Pilling, Matthew A.....	Detroit
McClure, Roy D.....	Detroit	Murphy, Scipio G.....	Detroit	Pinkard, Karl G.....	Dearborn
McClure, William R.....	Detroit	Murphy, W. M.....	Detroit	Pink, Rose M.....	Detroit
McColl, Charles W.....	Wyandotte	Murphy, Robert T.....	Detroit	Pinney, Lyman J.....	Detroit
McColl, Clarke M.....	Detroit	Murray, George M.....	Detroit	Pino, Ralph H.....	Detroit
McColl, Kenneth M.....	Detroit	Murray, Thomas H.....	Detroit	Piper, Clark C.....	Detroit
McCollum, E. B.....	Detroit	Murray, William A.....	Detroit	Piper, Ralph R.....	Detroit
McCord, Carey P.....	Detroit	Muske, Paul H.....	Detroit	Pittman, J. E.....	Detroit
McCormick, Colin C.....	Dearborn	Myers, Dan W.....	Detroit	Plaggemeyer, H. W.....	Detroit
McCullough, Lester E.....	Detroit	Myers, Gordon B.....	Detroit	Platz, Carol K.....	Detroit
McDonald, Angus L.....	Detroit	Nagle, John W.....	Wyandotte	Plaskow, Harold.....	Detroit
McDonald, George O.....	Detroit	Nahigian, Russell.....	Dearborn	Podezwa, John W.....	Grosse Pointe Woods
McEvitt, William G.....	Detroit	Naud, Henry J.....	Detroit	Podolsky, Harold M.....	Detroit
McFadyen, Hugh A.....	Detroit	Naylor, Archibald E.....	Detroit	Poirier, Ralph A.....	Detroit
McGarvah, A. W.....	Detroit	Naylor, Arthur H.....	Detroit	Polentz, Charles.....	Detroit
McGarvah, Jos. A.....	Detroit	Neeb, Walter G.....	Detroit	Pollock, John J.....	Detroit
McGhee, Richard S.....	Detroit	Neill, Edwin J.....	Detroit	Pool, Walter D.....	Detroit
McGillicuddy, Walter E.....	Detroit	Nelson, Harry M.....	Detroit	Poos, Edgar E.....	Detroit
McGinnis, Daniel H.....	Detroit	Nelson, Victor.....	Detroit	Porretta, Anthony C.....	Detroit
McGlaughlin, Nicholas D.....	Wyandotte	Neumann, Arthur J.....	Detroit	Porretta, F. S.....	Detroit
McGough, Joseph M.....	Detroit	Newbarr, Arthur A.....	Detroit	Posner, Irving.....	Detroit
McGraw, Arthur B.....	Detroit	Newman, Max Karl.....	Detroit	Pratt, Jean P.....	Detroit
McGuire, M. Ruth.....	Detroit	Nichamin, Samuel J.....	Detroit	Pratt, Lawrence A.....	Detroit
McIntosh, W. V.....	Detroit	Nickels, Albert W.....	Detroit	Prendergast, John J.....	Dryden
McIntyre, W. B.....	Detroit	Nickerson, Dean.....	Detroit	Priborsky, Benjamin H.....	Detroit
McKean, G. Thomas.....	Detroit	Nielson, Aage E.....	Detroit	Procalo, Alex B.....	Dearborn
McKean, Richard M.....	Detroit	Nigro, Norman D.....	Detroit	Price, Alvin Edwin.....	Detroit
McKenna, Charles J.....	Detroit	Nill, John B.....	Detroit	Price, A. Hazen.....	Detroit
McKinley, Donald.....	Detroit	Nill, William F.....	Detroit	Proctor, Bruce.....	Detroit
McKinnon, John D.....	Detroit	Noble, William C.....	Ecorse	Proud, Robert H.....	Flat Rock
McLane, Harriet E.....	Detroit	Noer, Rudolf J.....	Grosse Pointe Farms	Fugliesi, Benedetto.....	Detroit
McLean, Don W.....	Detroit	Nolan, Bernard E.....	Detroit	Purcell, Frank H.....	Detroit
McLean, Harold G.....	Detroit	Nolting, Wilfred S.....	Detroit	Purves, William L.....	Detroit
McPherson, R. J.....	Detroit	Norconk, A. A.....	Detroit	Quigley, Eugene.....	Dearborn
McQuiggan, Mark R.....	Detroit	Norcott, Edith S.....	Detroit	Quigley, William.....	Detroit
McRae, Donald H.....	Detroit	Norris, Edgar.....	Grosse Pointe	Quinn, Edward L.....	Detroit
Meinecke, Helmuth A.....	Detroit	Northrop, Arthur K.....	(E) Detroit	Rahm, Lambert P.....	Detroit
Mellen, Hyman S.....	Detroit	Norton, A. B.....	Detroit	Raiford, Frank P.....	Detroit
Melink, Maxim P.....	Detroit	Norton, Charles S.....	Detroit	Raiford, Frank P., Jr.....	Detroit
Menagh, Frank R.....	Detroit	Norton, Richard C.....	Detroit	Ramsey, Edward B.....	Detroit
Mendelsohn, R. J.....	Detroit	Novy, R. L.....	Detroit	Raskin, Morris.....	Detroit
Merkel, Charles C.....	Grosse Pointe	Nowicki, Joseph A.....	Detroit	Rastello, Peter B.....	Detroit
Merrill, William O.....	Detroit	Nunn, James W.....	Detroit	Ratigan, Carl S.....	Dearborn
Merritt, Earl G.....	Detroit	O'Brien, E. J.....	Detroit	Rau, Frederick W.....	Detroit
Mersky, Charlotte I.....	Detroit	O'Brien, G. M.....	Detroit	Ravnor, Harold F.....	Detroit
Metzger, Harry C.....	Detroit	O'Donnell, Charles H.....	Dearborn	Reberdy, George J.....	Detroit
Meyer, Ruben.....	Detroit	O'Donnell, David H.....	(E) Detroit	Redfern, William E.....	Detroit
Meyers, Maurice P.....	Detroit	O'Donnell, Dayton H., Jr.....	Detroit	Reed, E. Hobart.....	(A) Detroit
Meyers, P. Marjorie H.....	Detroit	Ohmart, Galen B.....	Detroit	Reed, H. Walter.....	Detroit
Meyers, Solomon G.....	Detroit	O'Hara, James T.....	Detroit	Reed, Ivor E.....	Detroit
Miley, H. H.....	Detroit	Ohrt, Harold F.....	Detroit	Rees, Howard C.....	Detroit
Millard, Glenn E.....	Detroit	Okun, Milton H.....	Detroit	Reichling, Raymond J., Jr.....	Detroit
Miller, Daniel H.....	Detroit	Olen, Alex.....	Detroit	Reid, John Gilbert.....	Detroit
Miller, Elmer B.....	Detroit	O'Linn, Francis P.....	Detroit	Reid, Wesley G.....	Detroit
Miller, Glenn F.....	Detroit	Olmsted, George.....	Detroit	Reiff, Morris V.....	Detroit
Miller, Karl.....	Detroit	Olmsted, Wm. R.....	Detroit	Reinbolt, Charles A.....	(L) Detroit
Miller, Myron H.....	Detroit	Olson, James A.....	Detroit	Reinsh, Ernest R.....	Detroit
Miller, Thomas H.....	Detroit	Oman, Cyrus F.....	Detroit	Reisman, Nathan J.....	Detroit
Miller, Wm. E.....	Detroit	Oppenheim, J. M.....	Detroit	Renaud, G. L.....	(E) Detroit
Mills, Clinton C.....	Detroit	Orecklin, L.....	Detroit	Rennell, Leo P.....	Detroit
Mills, Georgia V.....	Royal Oak	Organ, Fred W.....	Detroit	Renton, George W.....	Detroit
Mintz, Morris J.....	Detroit	Ormond, John K.....	Detroit	Reske, Alven.....	Dearborn
Mintz, Edward I.....	Detroit	O'Rourke, Paul V.....	Detroit	Reveno, William S.....	Detroit
Miral, Solomon P.....	Detroit	O'Rourke, R. M.....	Detroit	Rexford, W. K.....	Detroit
Miselevich, Sophie.....	Detroit	Osius, Eugene A.....	Detroit	Reye, Heinrich A.....	Detroit
Mitchell, Augustus W.....	Ecorse	Ott, Harold A.....	Detroit	Reynor, C. E.....	Detroit
Mitchell, C. Leslie.....	Detroit	Ottaway, John P.....	Detroit	Reynolds, Lawrence.....	Detroit
Mitchell, Gertrude F.....	Detroit	Owen, Clarence I.....	Detroit	Reynolds, R. P.....	Detroit
Mitchell, Ralston S.....	Detroit	Owen, James A.....	Detroit	Rezanka, Harold J.....	Grosse Pointe
Moehlig, Robert C.....	Detroit	Palmer, Alice E.....	Detroit	Rhoades, Francis P.....	Detroit
Mogill, George.....	Detroit	Palmer, H. Johnston.....	(L) Detroit	Rice, Harold B.....	Detroit
Moisides, V. P.....	Detroit	Pangburn, L. E.....	Detroit	Rice, Meshel.....	Bremerton, Wash.
Moll, Clarence D.....	Detroit	Panic, Stephen M.....	Detroit	Richardson, Allan L.....	Detroit
Molner, Joseph G.....	Detroit	Panzner, Edward J.....	(E) Detroit	Richardson, Robert P.....	Wayne
Moloney, J. Clark.....	Birmingham	Papp, Sander D.....	Detroit	Rick, Paul J.....	Detroit
Mond, Edward.....	Detroit	Parker, Benjamin R.....	Detroit	Ridge, Ralph W.....	Wyandotte
Monfort, Willard.....	(L) Highland Park	Parker, Dayton L.....	Detroit	Rieckoff, George G.....	Detroit
Monson, Robert C.....	Detroit	Parker, Walter R.....	(E) Detroit	Rieden, James A.....	Detroit
Montante, Joseph R.....	Detroit	Parr, Robert W.....	Detroit	Rieg, John F.....	Detroit
Montgomery, John C.....	Detroit	Parsons, John P.....	Grosse Pointe Park	Rieger, John B.....	Detroit
Monto, Raymond.....	Detroit	Pasternacki, Nobert T.....	Detroit	Rieger, Mary H.....	Detroit



# ROSTER

Riethmiller, Robert.....	Detroit	Schneider, Alexander.....	Detroit	Snedeker, Bernard C.....	Detroit
Riker, J. L., Jr.....	Traverse City	Schneider, Curt P.....	Detroit	Snow, L. W.....	Northville
Riseborough, E. C.....	Detroit	Schoenfield, Gilbert D.....	Detroit	Snyder, Arthur M.....	Detroit
Rizzo, Frank.....	Grosse Pointe Park	Scholes, Daniel R.....	Detroit	Sobel, Robert A.....	Detroit
Robb, Edward L.....	Detroit	Schorr, Robert L.....	(E) Detroit	Sokolow, Raymond A.....	Detroit
Robb, Herbert F.....	Belleville	Schooten, Sarah S.....	Detroit	Somers, Donald C.....	Detroit
Robb, J. Milton.....	Grosse Pointe Village	Schraer, Paul H.....	Detroit	Sonda, Lewis P.....	Detroit
Robertson, Stanley B.....	Detroit	Schreiber, Frederic.....	Detroit	Sorock, Milton L.....	Detroit
Robertson, Tom H.....	Detroit	Schroeder, Carlisle F.....	Detroit	Spademan, Loren C.....	Detroit
Robins Samuel C.....	Detroit	Schulte, Carl H.....	Detroit	Spalding, Edward.....	Detroit
Robinson, Edwin L.....	Detroit	Schultz, Ernest C.....	Detroit	Sparring, Harold L.....	Northville
Robinson, Fred L.....	Dearborn	Schultz, Robert F.....	Detroit	Speck, Carlos C.....	Allen Park
Robinson, George W.....	(L) Detroit	Schwartz, Ben.....	Detroit	Spector, Maurice J.....	Detroit
Robinson, Harold A.....	Detroit	Schwartz, Louis A.....	Detroit	Spero, Gerald D.....	Detroit
Robinson, Howard.....	Detroit	Schwartz, Oscar D.....	Detroit	Sperry, Frederick L.....	Detroit
Robinson, R. J.....	Detroit	Schwartzberg, Jos. A.....	Detroit	Spiro, Adolph.....	Detroit
Rogers, Aaron Z.....	Grosse Point Woods	Schweigert, C. F.....	Detroit	Springborn, Benjamin R.....	Detroit
Rogers, George E. B.....	Detroit	Sciarrino, Stanley V.....	Detroit	Sprunk, Carl J.....	Detroit
Rogers, James D.....	Wyandotte	Scott, R. J.....	Detroit	Squires, W. H.....	Eloise
Rogin, James R.....	Detroit	Scott, William J.....	Grosse Pointe Farms	Stafford, Frank W. J.....	Detroit
Rogoff, Abraham S.....	Detroit	Scoville, Victor.....	Detroit	Stalker, Hugh.....	Grosse Pointe
Rohde, Paul C.....	Detroit	Scruton, Foster D.....	Detroit	Stamell, Meyer.....	Detroit
Rom, Jack.....	Detroit	Secord, Eugene W.....	Detroit	Staniszewski, Casimir.....	Detroit
Roman, Stanley J.....	Detroit	Seeley, James B.....	Dearborn	Stanton, James M.....	Detroit
Roney, Eugene H.....	Detroit	Seeley, Ward F.....	Detroit	Stanton, Myron R.....	Detroit
Rosbolt, Oscar P.....	Detroit	Segar, Laurence F.....	Detroit	Stapleton, William J., Jr.....	(L) Detroit
Rose, Bernard.....	Detroit	Seibert, Alvin H.....	Grosse Pointe Park	Starrs, Thomas C.....	Detroit
Rosen, Harold M.....	Detroit	Selby, C. D.....	Detroit	Staub, Howard P.....	Detroit
Rosenbaum, Herbert.....	Detroit	Sellers, Charles W.....	Detroit	Stearns, Alex B.....	Detroit
Rosenbloom, Alvin B.....	Eloise	Sellers, Graham.....	Detroit	Steele, Hugh.....	Detroit
Rosenman, J. D.....	Detroit	Sengpiel, Gene.....	Detroit	Stefani, Ernest L.....	Detroit
Rosenthal, Louis H.....	Detroit	Serrester, Bernard F.....	Detroit	Stefani, Raymond T.....	Detroit
Rosenthal, Samuel.....	Detroit	Sewell, George.....	Detroit	Steffensen, Ellis.....	Detroit
Rosenwach, Felix F.....	Detroit	Shafarman, Eugene M.....	Detroit	Stein, Albert H.....	Detroit
Rosenzweig, Saul.....	Detroit	Shaffer, Jos. H.....	Detroit	Stein, Edward.....	Detroit
Ross, Ben C.....	Detroit	Shaffer, Loren W.....	Detroit	Stein, James R.....	Ferndale
Ross, Donald G.....	Grosse Pointe	Shaffer, Royce R.....	Detroit	Stein, Saul Charles.....	VanDyke
Ross, Hyman.....	Detroit	Shannon, William F.....	Detroit	Steinbach, Henry B.....	Detroit
Rotarius, E. M.....	Detroit	Shapiro, I. Allen.....	Detroit	Steinberger, Eugene.....	Detroit
Roth, Edward T.....	Detroit	Shapiro, Jacob.....	Detroit	Steiner, Gabriel.....	Detroit
Roth, Theodore I.....	Detroit	Shapiro, Reuben I.....	Detroit	Steiner, Louis J.....	Detroit
Rothbart, Harold B.....	Detroit	Sharrer, Charles H.....	Detroit	Steinhardt, Milton J.....	Detroit
Rothman, Emil D.....	Detroit	Shaw, Norman D.....	Dearborn	Stellhorn, Chester E.....	Detroit
Rothman, H. R.....	Detroit	Shelden, Warren E.....	Detroit	Stellhorn, Mary Christine.....	Detroit
Rottenberg, Leon.....	Detroit	Sheldon, John A.....	Detroit	Sterba, Richard F.....	Detroit
Rowda, Michael S.....	Detroit	Shelton, C. F.....	Detroit	Sterling, Robert R.....	Detroit
Rowell, Robert C.....	Eloise	Sheppard, Emma L. W.....	Centerline	Stern, Edward A.....	Detroit
Rowell, Wilfred J.....	Detroit	Sherman, William LaRue.....	Detroit	Stern, Henry L.....	Detroit
Rucker, Julian J.....	Detroit	Sherrin, Edgar R.....	Detroit	Stern, Leonard H.....	Van Dyke
Ruedemann, A. D.....	Detroit	Sherwood, DeWitt L.....	(L) Detroit	Stern, Louis D.....	Detroit
Rueger, Milton J.....	Detroit	Shewchuk, Alexander P.....	Allen Park	Stevenson, Charles.....	Detroit
Rueger, Ralph C.....	Detroit	Shields, William L.....	Detroit	Stewart, Harry L.....	Detroit
Runge, Edward F.....	Dearborn	Shifrin, Peter G.....	Detroit	Stewart, Thomas O.....	Detroit
Rupprecht, Emil F.....	Detroit	Shiovitz, Louis.....	Detroit	Stiefel, Daniel M.....	Detroit
Ruskin, Samuel H.....	Detroit	Shippey, N. R.....	Eloise	Stirling, Alex M.....	Detroit
Russell, John C.....	Detroit	Shipton, W. Harvey.....	Detroit	Stith, Dwight E.....	Detroit
Rutzen, Arthur C.....	Detroit	Shlain, Benjamin.....	Detroit	Stobbe, Godfrey D.....	New York, N. Y.
Rydzewski, Jos. B.....	Detroit	Shore, O. J.....	Detroit	Stocker, Lawrence L.....	Detroit
Ryerson, Frank L.....	Detroit	Short, Gerald.....	Detroit	Stockwell, Benjamin W.....	Detroit
Ryerson, F. Stuart.....	Detroit	Shotwell, Carlos W.....	(L) Detroit	Stokfisz, Thaddeus.....	Detroit
Sack, Anthony G.....	Detroit	Shulak, Irving B.....	Detroit	Stout, Lindley H.....	Detroit
Sage, Bernard A.....	Dearborn	Shumaker, Edward J.....	Detroit	Strath, Claire L.....	Detroit
Sage, Edward O.....	(L) Detroit	Shurly, Burt R.....	(E) Detroit	Strand, Martin.....	West Dearborn
Sage, Thomas.....	Detroit	Siddall, Roger S.....	Detroit	Stricker, Henry D.....	Detroit
Sager, Edward L.....	Detroit	Sieber, Edward H.....	Dearborn	Strickroot, Fred L.....	Detroit
St. Amour, Hector.....	Detroit	Siefert, John L.....	Detroit	Strohschein, Don F.....	Detroit
St. Louis, R. J.....	River Rouge	Siefert, William A.....	Detroit	Stryker, Joan C.....	Grosse Isle
Sakorraphos, Stelios N.....	Detroit	Siegel, Henry.....	Detroit	Stryker, Walter A.....	Wyandotte
Salchow, Paul T.....	Detroit	Sill, Jack A.....	Detroit	Stubbs, C. T.....	Detroit
Salowich, John N.....	Allen Park	Silverman, I. Zable.....	Detroit	Stubbs, Harold W.....	Detroit
Saltzstein, Harry C.....	Detroit	Silver, Israel.....	Detroit	Stucheli, Milton B.....	Grosse Pointe
Sand, Harry H.....	Dearborn	Silverman, Max.....	Detroit	Stump, George D.....	Detroit
Sander, Irvin W.....	Detroit	Silverman, Maurice M.....	Detroit	Sugar, David I.....	Detroit
Sanders, Alex W.....	Detroit	Simmons, Donald R.....	Detroit	Sugar, H. Saul.....	Detroit
Sanderson, Alvord R.....	Grosse Pointe Park	Simon, Emil R.....	Detroit	Sugarman, Marcus H.....	Detroit
Sanderson, Suzanne M.....	Detroit	Simon, Heinz G.....	Detroit	Sullivan, Hugh A.....	Detroit
Sandler, Nathaniel.....	Detroit	Simpson, Clarence E.....	(L) Detroit	Summers, William A.....	Detroit
Sands, G. E.....	Detroit	Sinclair, James W.....	Detroit	Summers, William S.....	Detroit
Sandweiss, D. J.....	Detroit	Singer, Floyd W.....	Dearborn	Surbis, John P.....	Detroit
Sapala, M. Andrew.....	Los Angeles, Calif.	Sippola, George W.....	Detroit	Sutherland, Jacob M.....	Detroit
Sargent, William R.....	Detroit	Sisson, John M.....	Detroit	Swanson, Carl W.....	Detroit
Sarracino, John B.....	Detroit	Skinner, W. Clare.....	Detroit	Swanson, Cleary N.....	Detroit
Sauk, John J.....	Detroit	Sklover, I. J.....	Detroit	Swanson, Robert G.....	Detroit
Saunders, William H.....	Dearborn	Skrzycki, Stephen S.....	Detroit	Sweeney, Donald, Jr.....	Detroit
Sauter, Simon H.....	Detroit	Skully, Edward J.....	Detroit	Swift, Karl L.....	Detroit
Savignac, Eugene M.....	Detroit	Sladen, Frank J.....	Grosse Pointe	Switzer, Bertrand C.....	Detroit
Scarney, Herman D.....	Detroit	Slahetke, Vincent E.....	Detroit	Syphax, Charles S.....	Detroit
Schaefer, Robert L.....	Detroit	Slate, Raymond N.....	Detroit	Szappanyos, Bela T.....	Detroit
Schaeffer, Martin.....	Detroit	Slaughter, Fred M.....	Detroit	Szilagyi, D. Emerick.....	Detroit
Schembeck, I. S.....	Detroit	Slaughaupt, J. G.....	Detroit	Szedia, J. C.....	Detroit
Schenden, Augustine J.....	Melvindale	Slazinski, Leo W.....	Detroit	Szladek, Frank J.....	Wyandotte
Schiller, A. E.....	Detroit	Slevin, John G.....	Detroit	Szmigiel, A. J.....	Detroit
Schillinger, Harold K.....	Dearborn	Sliwin, Edward P.....	Detroit	Szokolay, Joseph P.....	Detroit
Schinagel, Geza.....	Detroit	Slusky, Joseph.....	Detroit	Talbot, Frank G.....	Detroit
Schirack, Ray D.....	Grosse Pointe Woods	Small, Henry.....	Detroit	Tallant, Edward J.....	Detroit
Schkloven, Norman.....	Detroit	Smathers, Homer M.....	Detroit	Tamblin, E. J.....	Detroit
Schlacht, George F.....	Romulus	Smeck, Arthur R.....	Detroit	Tapert, Julius C.....	Detroit
Schlafer, Nathan H.....	Detroit	Smith, Clarence V.....	Detroit	Tasker, Helen.....	Detroit
Schlemer, John H.....	Detroit	Smith, Claude A.....	River Rouge	Tatellis, Gabriel.....	Detroit
Schlesinger, Henry.....	Detroit	Smith, F. Janney.....	Detroit	Taurence, William H.....	Wyandotte
Schmaltz, John D.....	Detroit	Smith, Henry L.....	Detroit	Taylor, Aaron.....	Detroit
Schmidt, Harry E.....	Detroit	Smith, J. Allen.....	Detroit	Taylor, Ivan B.....	Detroit
Schmidt, Milton R.....	Trenton	Smith, James A.....	Detroit	Taylor, Nelson M.....	Grosse Pointe
Schmier, Burton L.....	Detroit	Smith, Kenneth D.....	Detroit	Taylor, Reu Spencer.....	(L) Detroit
Schmitt, Norman L.....	Detroit	Smyka, Edward J.....	Detroit	Tazzioli, Henry A.....	Detroit
Schneck, R. J.....	Detroit	Smythe, Charley J.....	Eloise	Tear, Malcolm J.....	Detroit



# ROSTER

Teitelbaum, Myer.....Detroit  
Tenaglia, Thomas A.....Ecorse  
Tenerowicz, Rudolph G.....Detroit  
Texter, Elmer C.....Detroit  
Thaler, William J.....Detroit  
Thompson, Arthur Lee.....Detroit  
Thompson, H. E.....Detroit  
Thompson, H. O.....Detroit  
Thompson, W. A.....Detroit  
Thomson, Alexander.....(E) Detroit  
Thornell, Harold E.....Detroit  
Thorstad, Merrill J.....Detroit  
Thosteson, George C.....Detroit  
Tichenor, E. D.....Detroit  
Toaz, Robert B.....(E) Detroit  
Toepel, Otto T.....(E) Detroit  
Tomsu, Charles L.....Detroit  
Top, F. H.....Detroit  
Torres, Estelle.....Detroit  
Townsend, Frank M.....Detroit  
Trenzenza, W. Kenneth.....Detroit  
Troester, George A.....Detroit  
Trombino, James F.....Detroit  
Trombley, Bryan.....Detroit  
Trombley, Joseph J., Jr.....Detroit  
Truszkowski, Edward G.....Hamtramck  
Trythall, S. W.....Detroit  
Tulloch, John.....Detroit  
Tupper, Roy D.....Detroit  
Turbett, Claude W.....Detroit  
Turcotte, Vincent J.....Detroit  
Turkel, Henry.....Detroit  
Turnbull, Jack V.....Dearborn  
Tyson, William E. E.....(L) Detroit

Ujda, Chester J.....Wayne  
Ulbrich, Henry L.....Detroit  
Ulrich, Willis H.....Detroit  
Umohrev, Clarence E.....Detroit  
Usher, William Kay.....Detroit

Vale, C. Fremont.....Detroit  
VanBaalen, M. R.....Detroit  
VanBeelaere, L. H.....Ecorse  
Van Eck, James E.....Detroit  
VanGundy, Clyde R.....Detroit  
Van Nest, A. E.....Detroit  
Van Rhee, George.....Detroit  
Van Riper, Steven.....Detroit  
Vardon, Colin C.....Detroit  
Vardon, Edward M.....Detroit  
Vasu, V. O.....Detroit  
Vergosen, Harry E.....Detroit  
Vincent, James LeRoi.....Wayne  
Vjda, Chester I.....Wayne  
Vogel, Hyman A.....Detroit  
Vokes, Milton D.....Detroit  
Vollmar, G. Kenneth.....Dallas, Ore.  
Vonder Heide, E. C.....Detroit  
Vossler, A. E.....Detroit  
Vreeland, C. Emerson.....Detroit

Waddington, Jos. E. G.....(E) Detroit  
Waggoner, C. Stanley.....Detroit  
Waggoner, Lyle G.....Detroit  
Wainger, Max J.....Detroit  
Wainstock, Michael.....Detroit

Wakeman, Everal M.....Dearborn  
Waldbott, George L.....Detroit  
Walker, Enos G.....Detroit  
Walker, J. Paul.....Detroit  
Walker, Roger V.....Detroit  
Wallace, S. Willard.....Detroit  
Walls, Arch.....Detroit  
Walser, Howard Carleton.....Detroit  
Walsh, Charles R.....Lake Worth, Fla.  
Walsh, Francis P.....Detroit  
Walter, Arthur.....Detroit  
Walters, Albert G.....Detroit  
Waltz, Paul J.....Detroit  
Ward, George F.....Detroit  
Warden, Horace F. W.....Detroit  
Warner, P. L.....Detroit  
Warren, Irving A.....Detroit  
Warren, Wadsworth.....Detroit  
Wasserman, Lewis C.....Detroit  
Waszak, Charles J.....Detroit  
Watson, Douglas J.....Detroit  
Watson, Harwood G.....Dearborn  
Watson, J. Edwin.....Detroit  
Watson, Robert W.....Detroit  
Watts, Frederick B.....Detroit  
Watts, John C.....Detroit  
Watts, John J.....Detroit  
Wayne, Morris A.....Detroit  
Weaver, Clarence E.....Detroit  
Weaver, Delmar F.....Grosse Pointe  
Weber, Karl.....Detroit  
Webster, John E.....Detroit  
Weed, Milton R.....Detroit  
Wehenkel, Albert M.....(L) Detroit  
Weiner, Maurice B.....Detroit  
Weingarden, David H.....Detroit  
Weinstein, Jacob.....Detroit  
Weisberg, A. Allen.....Detroit  
Weisberg, Harry.....Detroit  
Weisberg, Jacob.....Detroit  
Weisenthal, Irvin.....Detroit  
Weiser, Frank A.....Detroit  
Weiss, Casimer P.....Detroit  
Weiss, Jack I.....Detroit  
Weiss, I. G.....Detroit  
Welch, John H.....Detroit  
Weller, Charles N.....Detroit  
Wells, Martha.....Detroit  
Weltman, Carl.....Detroit  
Wendel, Jacob S.....Detroit  
Wenzel, Jacob F.....Detroit  
West, Howard Gaige.....Detroit  
Weston, Bernard.....Detroit  
Weston, Earl E.....Detroit  
Weston, Horace L.....Detroit  
Weyher, Russell F.....Detroit  
Whalen, Neil J.....Detroit  
Wharton, Thomas V.....Wyandotte  
Wheeler, Stewart C.....Detroit  
Whinnerv, Randall A.....Detroit  
White, Milo R.....Detroit  
White, Milton W.....Detroit  
White, Prosper D., Jr.....Detroit  
White, Theodore M.....Detroit  
Whitehead, Leston S.....Detroit  
Whitehead, Walter K.....Detroit  
Whiteley, Robert K.....Detroit  
Whitney, Elmer L.....Detroit

Whitney, Rex E.....Detroit  
Wiant, John L.....Detroit  
Whittaker, Alfred H.....Detroit  
Wickham, A. B.....(L) Phoenix, Ariz.  
Wiechowski, Henry E.....Detroit  
Wiener, I.....Detroit  
Wiener, Morton.....Detroit  
Wietersen, Fred K.....Detroit  
Wight, Fred B.....Detroit  
Wilcox, L. F.....Detroit  
Wilhelm, Seymour.....Detroit  
Wilkinson, A. P.....Detroit  
Williams, Clarence J.....Detroit  
Williamson, John G.....Dearborn  
Wills, Josephus N.....Detroit  
Wilner, Irvin A.....Detroit  
Wilson, Andrew.....Detroit  
Wilson, Gerald A.....Detroit  
Wilson, M. C.....Detroit  
Wilson, Stuart C.....Detroit  
Wilson, Walter J.....(E) Detroit  
Wiren, Lennart W., Jr.....Detroit  
Wishropp, E. A.....Grosse Pointe  
Wisner, Harold E.....Detroit  
Wissman, H. C.....Dearborn  
Wittenberg, Arthur A.....Detroit  
Wittenberg, Samson S.....Detroit  
Wittenberg, Sidney S.....Detroit  
Witter, Frank C.....Detroit  
Witter, Joseph A.....Detroit  
Witus, Carl.....Detroit  
Wolfe, Max O.....Detroit  
Wollank, Helen Wilson.....Detroit  
Wollenberg, R. A. C.....Detroit  
Wood, Kenneth A.....Detroit  
Wood, Wilford C.....Detroit  
Woodburne, Harris L.....Detroit  
Woody, Norman L.....Detroit  
Woods, W. Edward.....Detroit  
Woodworth, William P.....Detroit  
Worzniak, Joseph J.....Wyandotte  
Wreggit, Winston R.....Detroit  
Wright, Charles H.....Detroit  
Wright, Lance S.....Northville  
Wruble, Joseph.....Detroit  
Wunsch, Richard E.....Detroit

Yesayian, H. G.....Detroit  
Yetzer, William J.....Detroit  
Yott, William J.....Detroit  
Young, Donald A.....Detroit  
Young, Donald C.....Detroit  
Young, Lloyd B.....Detroit  
Young, Viola M.....Detroit

Zabinski, Edward J.....Detroit  
Zackheim, Herschel.....Dearborn  
Zbudowski, A. S.....Birmingham  
Zbudowski, Myron R.....Hamtramck  
Zemens, Joseph L.....Grosse Pointe Woods  
Zinn, George H.....Detroit  
Zinterhofer, John.....Birmingham  
Zinterhofer, Louis.....Royal Oak  
Zlatkin, Louis.....Detroit  
Zonniss, Marian.....Detroit  
Zukowski, Henry J.....Detroit  
Zukowski, Sigmund A.....Detroit

## Wexford County

Albi, R. W.....Garv, Ind.  
Daugharty, Robert V.....Cadillac  
Davidson, John G.....Cadillac  
Holm, Augustus.....Moline, Ill.  
Landy, George R.....Cadillac  
Lomman, Ralph.....Manton  
Masselink, H. J.....McBain

McManus, Edwin A.....Mesick  
Merritt, C. E.....Manton  
Moore, Gregory P.....Cadillac  
Moore, Sair C.....Cadillac  
Murphy, Michael R.....Cadillac  
Pave, Philip.....Cadillac  
Posthuma, Millard.....Cadillac

Purdy, Calvin E.....Buckley  
Seltzer, Sol N.....Redlands, Calif.  
Smith, Fred R.....Lake City  
Smith, Wallace J.....Cadillac  
Spinks, Robert E.....Cadillac  
Stokes, William H.....Lake City  
Tornberg, Gordon C.....Cadillac

# Woman's Auxiliary to the Michigan State Medical Society Roster 1949

## Allegan County

Brown, Mrs. L. E.....Otsego  
Brunson, Mrs. E. T.....Ganges  
Burdick, Mrs. J. G.....Allegan

Corkill, Mrs. C. C.....Saugatuck  
Hudnut, Mrs. O. D.....Plainwell  
Johnson, Mrs. E. B.....Allegan

Mahan, Mrs. J. E.....Allegan  
Miller, Mrs. K. C.....Saugatuck  
VanDerKolk, Mrs. Bert.....Hopkins

## Bay County

Alcorn, Mrs. Marshall.....Bay City  
Alcorn, Mrs. Kent.....Bay City  
Allen, Mrs. A. D.....Bay City  
Andrews, Mrs. F. T.....Bay City  
Asline, Mrs. J. Norris.....Essexville  
Ballard, Mrs. W. R.....Bay City  
Brown, Mrs. George M.....Bay City  
Chapin, Mrs. F. J.....Bay City  
Criswell, Mrs. Robert H.....Bay City  
Connely, Mrs. C. J.....Essexville  
Dardas, Mrs. M. J.....Bay City  
DeWaele, Mrs. Paul.....Bay City  
Dumond, Mrs. V. H.....Bay City  
Fisher, Mrs. Robert E.....Bay City  
Foster, Mrs. L. Fernald.....Bay City  
Freel, Mrs. John A.....Bay City  
Gale, Mrs. H. M.....Bay City  
Groomes, Mrs. Charles A.....Bay City

Hagelshaw, Mrs. G. L.....Bay City  
Haitinger, Mrs. K. S.....Auburn  
Hess, Mrs. Charles L.....Bay City  
Heuser, Mrs. H. N.....Bay City  
Huckins, Mrs. E. S.....Bay City  
Huckins, Mrs. Roger S.....Bay City  
Husted, Mrs. F. Pitkin.....Bay City  
Horowitz, Mrs. F. S.....Bay City  
Johnson, Mrs. Orlen S.....Bay City  
Jones, Mrs. Culver.....Essexville  
Knobloch, Mrs. H. Howard.....Bay City  
MacRae, Mrs. L. D.....Bay City  
McEwan, Mrs. J. H.....Bay City  
Medvesky, Mrs. M. J.....Bay City  
MacPhail, Mrs. J. C.....Bay City  
Miller, Mrs. Edwin C.....Bay City  
Moore, Mrs. Neal R.....Bay City  
Mosier, Mrs. D. J.....Bay City  
McLurg, Mrs. John.....Bay City

Pearson, Mrs. S. M.....Bay City  
Perkins, Mrs. Roy.....Bay City  
Reuter, Mrs. Clarence W.....Bay City  
Ruggles, Mrs. F. E.....Bay City  
Scrafford, Mrs. R. E.....Bay City  
Shafer, Mrs. Harold C.....Bay City  
Smith, Mrs. J. C.....Bay City  
Slattery, Mrs. M. R.....Bay City  
Stinson, Mrs. Walter S.....Bay City  
Stuart, Mrs. Kenneth.....Bay City  
Tartar, Mrs. C. S.....Bay City  
Urmston, Mrs. Paul R.....Bay City  
Vail, Mrs. Harry F.....Bay City  
Wilson, Mrs. T. G.....Bay City  
Wilcox, Mrs. James W.....Bay City  
Wittwer, Mrs. E. A.....Bay City  
Zaremba, Mrs. A. J.....Bay City  
Ziliak, Mrs. A. L.....Bay City

## Berrien County

Allen, Mrs. R. C.....St. Joseph  
Bailey, Mrs. John H.....Benton Harbor  
Bliesmer, Mrs. A. F.....Benton Harbor  
Bjork, Mrs. Harold A.....St. Joseph  
Cawthorne, Mrs. H. J.....Benton Harbor  
Conybeare, Mrs. R. C.....Benton Harbor  
Cowdery, Mrs. K. H.....St. Joseph  
Crowell, Mrs. R. C.....St. Joseph  
Dunnington, Mrs. R. N.....Benton Harbor  
Emery, Mrs. C. S.....St. Joseph  
Faber, Mrs. Michael.....Benton Harbor  
Fattie, Mrs. G. R., Jr.....Niles  
Garrett, Mrs. E. L.....Niles

Green, Mrs. Robert.....Eau Claire  
Gregory, Mrs. James.....Berrien Center  
Hanna, Mrs. P. G.....St. Joseph  
Hart, Mrs. Russell.....Niles  
Hershey, Mrs. N. J.....Niles  
Howard, Mrs. Frank.....Benton Harbor  
Howard, Mrs. R. B.....Benton Harbor  
Kelsall, Mrs. H. I.....St. Joseph  
King, Mrs. Byron B.....Benton Harbor  
Kok, Mrs. Harry.....Benton Harbor  
Lawton, Mrs. C. V.....Benton Harbor  
Lindenfeld, Mrs. Fred.....Niles  
Mitchell, Mrs. Carl.....Benton Harbor

Moore, Mrs. Scott.....Niles  
Ozeran, Mrs. Charles.....Benton Harbor  
Porter, Mrs. C. B.....Benton Harbor  
Pritchard, Mrs. H. M.....Niles  
Reagan, Mrs. Robert E.....Benton Harbor  
Rice, Mrs. Franklyn A.....Niles  
Rice, Mrs. Franklyn G.....Niles  
Richmond, Mrs. Dean.....St. Joseph  
Ruth, Mrs. J. G.....Benton Harbor  
Thorup, Mrs. D. W.....Benton Harbor  
Westervelt, Mrs. H. G.....Benton Harbor  
Woodford, Mrs. Hackley E.....Benton Harbor

## Branch County

Aldrich, Mrs. N. S.....Coldwater  
Andrews, Mrs. F. A.....Coldwater  
Bailey, Mrs. James E.....Coldwater  
Beck, Mrs. P. C.....Bronson  
Bien, Mrs. W. J.....Coldwater  
Culver, Mrs. D. T.....Bronson  
Culver, Mrs. B. W.....Coldwater

Fraser, Mrs. Robert J.....Coldwater  
Gist, Mrs. Nina C.....Coldwater  
Johnson, Mrs. D. B.....Coldwater  
Leitch, Mrs. Robert M.....Union City  
Meier, Mrs. Harold.....Coldwater  
Mool, Mrs. H. R.....Coldwater  
Olmsted, Mrs. Kenneth L.....Coldwater

Rees, Mrs. K. B.....Coldwater  
Rennell, Mrs. E. J.....Coldwater  
Slosser, Mrs. Paul.....Tekonsha  
Thomas, Mrs. J. A.....Coldwater  
Wade, Mrs. R. L.....Coldwater  
Walton, Mrs. M. J.....Quincy  
Weidner, Mrs. Harold R.....Coldwater

## Calhoun County

Amos, Mrs. Norman.....Battle Creek  
Barden, Mrs. Stuart.....Battle Creek  
Baribeau, Mrs. Roy.....Battle Creek  
Bodine, Mrs. Harold.....Battle Creek  
Bonifer, Mrs. Phillip.....Battle Creek  
Brainard, Mrs. Clifford.....Battle Creek  
Campbell, Mrs. Richard.....Battle Creek  
Capron, Mrs. Manley.....Battle Creek  
Chynoweth, Mrs. William.....Battle Creek  
Cooper, Mrs. John.....Battle Creek  
Finch, Mrs. Donald.....Battle Creek  
Fraser, Mrs. Robert.....Battle Creek  
Giddings, Mrs. Arthur.....Battle Creek  
Hansen, Mrs. Harvey.....Battle Creek  
Hansen, Mrs. Edwin.....Battle Creek  
Haughey, Mrs. Wilfred.....Battle Creek  
Hibbs, Mrs. Donald.....Battle Creek  
Hills, Mrs. Hilliary.....Battle Creek  
Holtom, Mrs. Benjamin.....Battle Creek  
Hollands, Mrs. Donald.....Battle Creek

Hubly, Mrs. James.....Battle Creek  
Humphrey, Mrs. Arthur.....Battle Creek  
Jeffery, Mrs. John.....Battle Creek  
Keagle, Mrs. Leland.....Battle Creek  
Kimball, Mrs. Arthur, Jr.....Battle Creek  
Kinde, Mrs. Mathew.....Battle Creek  
Kingsley, Mrs. Paul.....Battle Creek  
Kolvoord, Mrs. Theo.....Battle Creek  
LaFrance, Mrs. Frances.....Battle Creek  
Lam, Mrs. Frances.....Battle Creek  
Leach, Mrs. Robert.....Union City  
Levy, Mrs. Joseph.....Battle Creek  
Lowe, Mrs. Kenneth.....Battle Creek  
Lowe, Mrs. Stanley.....Battle Creek  
Manni, Mrs. Lawrence.....Battle Creek  
Meister, Mrs. Franklin.....Battle Creek  
Melges, Mrs. Fred.....Battle Creek  
Morrison, Mrs. Donald.....Battle Creek  
Patrick, Mrs. Gilbert.....Battle Creek  
Pearson, Mrs. Donald.....Battle Creek

Robins, Mrs. Hugh.....Battle Creek  
Robert, Mrs. John.....Battle Creek  
Rosenfeld, Mrs. Joseph.....Battle Creek  
Rover, Mrs. Clark.....Battle Creek  
Schwarz, Mrs. Frank.....Battle Creek  
Shipp, Mrs. Leland.....Battle Creek  
Simpson, Mrs. Robert.....Battle Creek  
Slagle, Mrs. George.....Battle Creek  
Sleight, Mrs. James.....Battle Creek  
Stadle, Mrs. Wendell.....Battle Creek  
Stifel, Mrs. Richard.....Battle Creek  
Swartz, Mrs. George.....Battle Creek  
Tannenholz, Harold.....Battle Creek  
Verity, Mrs. Lloyd.....Battle Creek  
Walters, Mrs. Fred.....Battle Creek  
Walters, Mrs. John.....Battle Creek  
Wencke, Mrs. Carl.....Battle Creek  
Winslow, Mrs. Sherwood.....Battle Creek  
Worgess, Mrs. Duane.....Battle Creek  
Zindler, Mrs. George.....Lacey



## AUXILIARY ROSTER

### Delta-Schoolcraft Counties

Bartley, Mrs. Geo. C. (widow).....Escanaba  
Benson, Mrs. George W.....Escanaba  
Boyce, Mrs. Donald H.....Escanaba  
Carlton, Mrs. Arthur J.....Escanaba  
Dehlin, Mrs. James.....Gladstone  
Defnet, Mrs. Harry J.....Escanaba

Frenn, Mrs. Nathan J.....Bark River  
Groos, Mrs. Harold Q.....Escanaba  
Groos, Mrs. Louis P.....Escanaba  
Hult, Mrs. Otto S.....Gladstone  
Lemire, Mrs. Donald.....Escanaba  
Lemire, Mrs. Wm. A.....Escanaba

Long, Mrs. Harry W. (widow) Escanaba  
Lindquist, Mrs. Norman.....Escanaba  
Miller, Mrs. Albert H.....Gladstone  
McInerney, Mrs. Robert Thomas A.....Escanaba  
Ryde, Mrs. Robert.....Gladstone  
Walch, Mrs. John J.....Escanaba

### Genesee County

Adams, Mrs. Burnell.....Flint  
Adams, Mrs. Chester.....Grand Blanc  
Anderson, Mrs. Harley.....Mt. Morris  
Anthony, Mrs. George.....Flint  
Bald, Mrs. Frederick.....Flint  
Barbour, Mrs. Fleming.....Flint  
Baird, Mrs. W. C.....Flint  
Baske, Mrs. Franklin.....Flint  
Bateman, Mrs. L. G.....Flint  
Benson, Mrs. John.....Flint  
Bernstein, Mrs. Eli.....Flint  
Beyer, Mrs. Damon.....Clio  
Beyer, Mrs. George.....Clio  
Bishop, Mrs. D. L.....Flint  
Blakely, Mrs. A. C.....Flint  
Bonathan, Mrs. A. T.....Flint  
Bradley, Mrs. Robert.....Flint  
Branch, Mrs. Hira.....Flint  
Brasie, Mrs. Donald.....Flint  
Briggs, Mrs. Guy.....Flint  
Bruce, Mrs. William.....Swartz Creek  
Buchanan, Mrs. William F.....Fenton  
Clark, Mrs. C. P.....Flint  
Collins, Mrs. James.....Flint  
Colwell, Mrs. Clifford.....Flint  
Cook, Mrs. Henry.....Flint  
Credille, Mrs. Barney.....Flint  
Curry, Mrs. George.....Flint  
Curtin, Mrs. John.....Flint  
Cutler, Mrs. Campbell.....Flint  
Dickstein, Mrs. Bernard.....Flint  
Eichorn, Mrs. Ernest.....Flint  
Eickhorst, Mrs. Thomas.....Flint  
Elliott, Mrs. H. B.....Flint  
Farhat, Mrs. Maynard.....Flint  
Fee, Mrs. Manson.....Flint  
Flynn, Mrs. Southard.....Flint  
Gelenger, Mrs. Stephen.....Flint

Gleason, Mrs. N. A.....Flint  
Gorne, Mrs. S. S.....Flint  
Griffin, Mrs. Ernest.....Flint  
Grover, Mrs. H. F.....Flint  
Guile, Mrs. Gordon.....Flint  
Gutow, Mrs. J. J.....Flint  
Hamilton, Mrs. A. J.....Flint  
Harper, Mrs. A. W.....Flint  
Harper, Mrs. Homer.....Flint  
Hiscock, Mrs. Harold.....Flint  
Hooper, Mrs. Kendall.....Flint  
Hubbard, Mrs. William.....Flint  
Hufton, Mrs. W. L.....Flint  
Jermstad, Mrs. Robert.....Flint  
Johnson, Mrs. Frank.....Flint  
Judd, Mrs. Alvin.....Flint  
Kaleta, Mrs. Edward.....Flint  
Kaufman, Mrs. L. D.....Flint  
Kirk, Mrs. Stella.....Flint  
Knapp, Mrs. Don.....Flint  
Knapp, Mrs. William.....Flint  
Kurtz, Mrs. John J.....Flint  
Limbach, Mrs. David.....Fenton  
Livesay, Mrs. Jackson.....Flint  
MacDuff, Mrs. R. Bruce.....Flint  
MacGregor, Mrs. R. Delbert.....Flint  
McLeod, Mrs. Kenneth.....Flint  
Macksood, Mrs. Joseph.....Flint  
Marshall, Mrs. William.....Flint  
Miller, Mrs. Bryce.....Flushing  
Miller, Mrs. E. E.....Flint  
Miner, Mrs. F. B.....Flint  
Moore, Mrs. Kenneth.....Flint  
Morrison, Mrs. Wm. H.....Grand Blanc  
Morrissey, Mrs. Vaughan.....Flint  
Mosier, Mrs. Edward.....Otisville  
Odle, Mrs. I. D.....Flint  
Orr, Mrs. Walter.....Fenton  
Pfeifer, Mrs. A. C.....Mt. Morris

Preston, Mrs. Otto.....Flint  
Randall, Mrs. Herbert.....Flint  
Reeder, Mrs. F. E.....Flint  
Richeson, Mrs. V. N.....Flint  
Rulney, Mrs. Max.....Flint  
Rundles, Mrs. Walter.....Flint  
Sandy, Mrs. Kenneth.....Flint  
Scavarda, Mrs. Charles.....Flint  
Schiff, Mrs. Benjamin.....Flint  
Schreiber, Mrs. E. O.....Flint  
Shantz, Mrs. Layton.....Flint  
Sheeran, Mrs. Dan.....Flint  
Sirna, Mrs. Anthony.....Flint  
Smith, Mrs. D. C.....Flint  
Smith, Mrs. E. C.....Flint  
Smith, Mrs. M. J.....Flint  
Sniderman, Mrs. Benjamin.....Flint  
Sorkin, Mrs. Sam.....Flint  
Sparks, Mrs. Harvey.....Flint  
Steffee, Mrs. Ralph.....Flint  
Stevenson, Mrs. William.....Flint  
Stroup, Mrs. Clayton.....Flint  
Tofteland, Mrs. Elmer.....Flint  
Treat, Mrs. D. L.....Flint  
Turner, Mrs. M. G.....Flint  
Van Harn, Mrs. R. S.....Flint  
Vary, Mrs. Edwin.....Flint  
Wark, Mrs. R. D.....Flint  
Wentworth, Mrs. John.....Flint  
Williams, Mrs. W. S.....Flint  
Willoughby, Mrs. Gordon.....Flint  
Willoughby, Mrs. L. L.....Flint  
Wills, Mrs. Tom.....Flint  
White, Mrs. Herbert.....Flint  
Winchester, Mrs. W. H.....Flint  
Woughter, Mrs. Harold.....Flint  
Wright, Mrs. Don R.....Flint  
Wyman, Mrs. John.....Grand Blanc

### Grand-Traverse-Leelanau-Benzie Counties

Beall, Mrs. J. G.....Traverse City  
Bolam, Mrs. E. J.....Sutton's Bay  
Brownson, Mrs. Jay J.....Kingsley  
Brownson, Mrs. Kneale M.....Traverse City  
Bushing, Mrs. B. B.....Traverse City  
Carrow, Mrs. Fleming.....Traverse City  
Clark, Mrs. Charles.....Traverse City  
Ellis, Mrs. Claude.....Sutton's Bay  
Evseff, Mrs. George.....Traverse City  
Gallagher, Mrs. William.....Traverse City  
Gauntlett, Mrs. J. W.....Traverse City  
Hall, Mrs. J. W.....Traverse City  
Hamilton, Mrs. Earl E.....Traverse City  
Haberlein, Mrs. Charles.....Traverse City

Huene, Mrs. Nevin.....Traverse City  
Hyslop, Mrs. William.....Traverse City  
Jerome, Mrs. Jerome T.....Traverse City  
Kyselka, Mrs. Harry.....Traverse City  
Lawton, Mrs. F. P.....Traverse City  
Lemen, Mrs. C. E.....Traverse City  
Lentz, Mrs. Robert J.....Traverse City  
Lossman, Mrs. Robert.....Traverse City  
Merritt, Mrs. Harry.....Traverse City  
Murphy, Mrs. Fred.....Traverse City  
Nickels, Mrs. M. M.....Traverse City  
Meng, Mrs. Ralph.....Traverse City  
Osterhagen, Mrs. H. F.....Traverse City

Osterlin, Mrs. Mark.....Traverse City  
Pike, Mrs. Donald.....Traverse City  
Powers, Mrs. Frank.....Traverse City  
Salon, Mrs. D. D.....Traverse City  
Sladek, Mrs. E. F.....Traverse City  
Sheffer, Mrs. Marcus.....Traverse City  
Thirlby, Mrs. E. L.....Traverse City  
Sheets, Mrs. R. P.....Traverse City  
Weitz, Mrs. Harry.....Traverse City  
Wilhelm, Mrs. E. C.....Traverse City  
Whitehouse, Mrs. John D.....Traverse City  
Wilcox, Mrs. Paul.....Traverse City  
Zielke, Mrs. I. H.....Traverse City  
Zimmerman, Mrs. J. G.....Traverse City

### Houghton-Baraga-Keweenaw Counties

Aldrich, Mrs. A. B.....Hancock  
Aldrich, Mrs. L. C.....Houghton  
Baumgartner, Mrs. W. W.....Houghton  
Braden, Mrs. Robert.....Lake Linden  
Brewington, Mrs. G. F.....Mohawk  
Burke, Mrs. J. J.....Hubbell  
Gallen, Mrs. George E.....Hancock  
Hillmer, Mrs. R. J.....Painesdale

Hosking, Mrs. F.....Laurium  
Kolb, Mrs. F. E.....Calumet  
LaBine, Mrs. Alfred.....Houghton  
Lepisto, Mrs. V.....Laurium  
Levin, Mrs. S.....Houghton  
Manthei, Mrs. W. A.....Lake Linden  
Murohy, Mrs. P. J.....Calumet  
McClure, Mrs. R. J.....Calumet

Roche, Mrs. A. C.....Laurium  
Roche, Mrs. A. M.....Laurium  
Sloan, Mrs. P. S.....Houghton  
Smith, Mrs. Charles R.....Hancock  
Stern, Mrs. I. D.....Houghton  
Scott, Mrs. Benton V. D.....Chassell  
Wickliffe, Mrs. T. P.....Calumet  
Winkler, Mrs. H. J.....L'Anse

### Ingham County

Altland, Mrs. J. K.....Lansing  
Atkinson, Mrs. E. H.....Lansing  
Badgley, Mrs. W. D.....Lansing  
Bauer, Mrs. T. I.....Lansing  
Behen, Mrs. W. C.....Lansing  
Bellinger, Mrs. E. G.....Lansing  
Berghorst, Mrs. John.....Lansing  
Bevez, Mrs.....Lansing  
Bradford, Mrs. Carl.....Lansing  
Breaker, Mrs. R. S.....Lansing  
Briede, Mrs. Paul.....Lansing  
Brown, Mrs. F. W.....Lansing  
Brubaker, Mrs. E. W.....Lansing  
Brucker, Mrs. Karl.....Lansing

Bruegal, Mrs. O. H.....Lansing  
Burhans, Mrs. Robert.....Lansing  
Calomeni, Mrs. A. D.....Lansing  
Cameron, Mrs. W. J.....Lansing  
Campbell, Mrs. A. M.....Lansing  
Carr, Mrs. E. I.....Lansing  
Christian, Mrs. L. G.....Lansing  
Clark, Mrs. W. E.....Mason  
Clinton, Mrs. G. R.....Mason  
Cook, Mrs. R. J.....Lansing  
Cope, Mrs. H. E.....Lansing  
Cowan, Mrs. J. A.....Charlotte  
Cross, Mrs. Frank.....Lansing  
Cummings, Mrs. G. D.....Lansing

Cummings, Mrs.....Lansing  
Cushman, Mrs. F. (widow).....Lansing  
Darling, Mrs. L. H.....Lansing  
Davenport, Mrs. C. S. (widow).....Lansing  
Dean, Mrs. C.....Lansing  
DeKleine, Mrs. W. M.....Lansing  
DeVries, Mrs. C. F.....Lansing  
Doyle, Mrs. C. P.....Lansing  
Drolett, Mrs. Donald.....Lansing  
Drolett, Mrs. F. C.....Lansing  
Drolett, Mrs. L. A.....Lansing  
Dunn, Mrs. F. C.....Lansing  
Dunn, Mrs. F. M.....Lansing  
Durelli, Mrs. G.....Lansing



## AUXILIARY ROSTER

Eblen, Mrs. Lansing  
 Economy, Mrs. D. Lansing  
 Engles, Mrs. Lansing  
 Feeney, Mrs. K. Lansing  
 Folkers, Mrs. L. M. Lansing  
 Fortino, Mrs. S. P. Lansing  
 Foust, Mrs. E. H. Lansing  
 French, Mrs. H. Lansing  
 Gardner, Mrs. C. Lansing  
 Goldner, Mrs. R. E. Lansing  
 Grabow, Mrs. Lansing  
 Grece, Mrs. Lansing  
 Harris, Mrs. H. Lansing  
 Harrison, Mrs. William. Lansing  
 Harrold, Mrs. J. F. Lansing  
 Hart, Mrs. L. C. Lansing  
 Hayford, Mrs. Lansing  
 Heald, Mrs. G. Lansing  
 Heckert, Mrs. F. B. Lansing  
 Heckert, Mrs. J. K. Lansing  
 Hermes, Mrs. E. J. Lansing  
 Heustis, Mrs. A. E. Lansing  
 Himmelberger, Mrs. R. J. Lansing  
 Hodges, Mrs. K. P. Lansing  
 Holland, Mrs. C. F. Lansing  
 Holm, Mrs. M. L. Lansing  
 Huggett, Mrs. C. Lansing  
 Hurth, Mrs. M. S. Lansing  
 Inch, Mrs. F. Lansing  
 Isbister, Mrs. J. L. Lansing  
 Jacob, Mrs. S. S. Lansing  
 Johnson, Mrs. K. H. Lansing  
 Jones, Mrs. F. A. (widow) Lansing  
 Jones, Mrs. F. A., Jr. Lansing  
 Kahn, Mrs. D. Lansing  
 Kalmbach, Mrs. R. E. Lansing  
 Keifer, Mrs. Guy (widow) Lansing  
 Keim, Mrs. C. D. Lansing  
 Klunzinger, Mrs. W. R. Lansing

Kraft, Mrs. L. C. Leslie  
 LeDuc, Mrs. Don. Lansing  
 Long, Mrs. Lansing  
 Loree, Mrs. M. C. Lansing  
 Lucas, Mrs. T. A. Lansing  
 Ludlum, Mrs. C. C. Lansing  
 Marinier, Mrs. Holt  
 Markuson, Mrs. K. W. Lansing  
 Martin, Mrs. W. Lansing  
 McCorvie, Mrs. C. R. Lansing  
 McCoy, Mrs. E. M. Grand Ledge  
 McCrumb, Mrs. R. R. Lansing  
 McElmurry, Mrs. L. R. Lansing  
 McGillicuddy, Mrs. J. E. Lansing  
 McGillicuddy, Mrs. O. Lansing  
 McGillicuddy, Mrs. R. J. Lansing  
 McIntyre, Mrs. J. E. Lansing  
 McNamara, Mrs. B. E. Lansing  
 Meade, Mrs. Robert. Lansing  
 Meade, Mrs. William. D. Lansing  
 Mercer, Mrs. W. E. Lansing  
 Miller, Mrs. H. A. (widow) Lansing  
 Mitchell, Mrs. A. B. Lansing  
 Morrison, Mrs. C. V. Lansing  
 Morrow, Mrs. R. J. Lansing  
 Niles, Mrs. B. D. Lansing  
 Ochsner, Mrs. P. Lansing  
 Osborn, Mrs. Lansing  
 Owen, Mrs. A. E. (widow) Lansing  
 Parker, Mrs. Earle. Leslie  
 Pinkham, Mrs. R. A. Lansing  
 Place, Mrs. E. H. Lansing  
 Potter, Mrs. E. Lansing  
 Prall, Mrs. H. J. Lansing  
 Randall, Mrs. O. M. Lansing  
 Richards, Mrs. F. Lansing  
 Robson, Mrs. E. J. Lansing  
 Rozan, Mrs. J. S. Lansing  
 Rozan, Mrs. M. Lansing

Rulison, Mrs. J. G. Lansing  
 Sander, Mrs. J. F. Lansing  
 Sharp, Mrs. M. Lansing  
 Schultz, Mrs. A. E. Lansing  
 Sherman, Mrs. G. Lansing  
 Sichler, Mrs. H. Lansing  
 Silverman, Mrs. L. Lansing  
 Snell, Mrs. D. Lansing  
 Snyder, Mrs. L. M. Lansing  
 Spaulding, Mrs. T. Lansing  
 Spencer, Mrs. C. T. (widow) Lansing  
 Spencer, Mrs. P. C. Lansing  
 Stanley, Mrs. A. Lansing  
 Steiner, Mrs. S. D. Lansing  
 Stiles, Mrs. F. Lansing  
 Strauss, Mrs. P. C. Lansing  
 Stringer, Mrs. C. J. Lansing  
 Swan, Mrs. Lansing  
 Swartz, Mrs. F. Lansing  
 Tamblын, Mrs. F. W. Lansing  
 Toothaker, Mrs. K. W. Lansing  
 Towne, Mrs. L. C. Lansing  
 Trescott, Mrs. R. F. Lansing  
 Trimby, Mrs. R. H. Lansing  
 Troost, Mrs. F. Holt  
 VanderSice, Mrs. E. R. Lansing  
 VanderZalm, Mrs. T. P. Lansing  
 Venier, Mrs. J. H. Lansing  
 Wadley, Mrs. R. Lansing  
 Walker, Mrs. Leo. Lansing  
 Warford, Mrs. J. T. (widow) Lansing  
 Weinburg, Mrs. H. B. (widow) Lansing  
 Wellman, Mrs. J. Lansing  
 Wilensky, Mrs. T. Lansing  
 Wiley, Mrs. Harold. Lansing  
 Willson, Mrs. Howard. Lansing  
 Wilson, Mrs. Harry. Lansing  
 Wight, Mrs. W. J. (widow) Lansing  
 Zeller, Mrs. C. A. Lansing

### Jackson County

Adams, Mrs. E. W. Jackson  
 Ahronheim, Mrs. J. H. Jackson  
 Alter, Mrs. R. H. Jackson  
 Anderson, Mrs. W. B. Jackson  
 Appel, Mrs. Saul. Jackson  
 Baker, Mrs. G. M. Parma  
 Bartholic, Mrs. F. W. Homer  
 Beckwith, Mrs. S. A. Stockbridge  
 Bullen, Mrs. G. R. Jackson  
 Bindshedler, Mrs. B. S. Jackson  
 Brown, Mrs. H. A. Jackson  
 Brashares, Mrs. Zane. Brooklyn  
 Clarke, Mrs. C. S. Jackson  
 Cooley, Mrs. R. M. Jackson  
 Corley, Mrs. Cecil. Jackson  
 Corley, Mrs. E. H. Jackson  
 Cox, Mrs. Ferdinand. Jackson  
 Crowley, Mrs. E. D. Jackson  
 Culver, Mrs. G. D. Stockbridge  
 DeMay, Mrs. C. E. Jackson  
 DeMay, Mrs. J. D. Jackson  
 Deming, Mrs. R. C. Jackson  
 Dengler, Mrs. C. R. Jackson  
 Durocher, Mrs. N. E. Jackson  
 Enders, Mrs. W. H. Jackson  
 Filip, Mrs. H. K. Jackson  
 Finton, Mrs. W. L. Jackson  
 Finton, Mrs. R. E. Jackson  
 Foust, Mrs. W. L. Grass Lake  
 Growt, Mrs. B. H. Addison  
 Hackett, Mrs. T. E. Jackson  
 Hackett, Mrs. T. L. Jackson  
 Hanft, Mrs. C. F. Springport  
 Hanna, Mrs. F. J. Jackson  
 Hardie, Mrs. G. C. Jackson  
 Harris, Mrs. L. J. Jackson

Hicks, Mrs. G. C. Jackson  
 Hays, Mrs. H. S. Jackson  
 Holst, Mrs. J. B. Jackson  
 Holstein, Mrs. A. P. Manchester  
 Huntley, Mrs. W. B. Jackson  
 Hurley, Mrs. H. L. Jackson  
 Kraft, Mrs. L. C. Leslie  
 Kudner, Mrs. D. F. Jackson  
 Lake, Mrs. W. H. Jackson  
 Landron, Mrs. Daniel. Jackson  
 Lathrop, Mrs. W. W. Jackson  
 Leahy, Mrs. E. O. Jackson  
 Leonard, Mrs. C. A. Jackson  
 Lenz, Mrs. C. R. Jackson  
 Lewis, Mrs. E. F. Jackson  
 Linden, Mrs. V. E. Jackson  
 Ludwick, Mrs. J. E. Jackson  
 McGarvey, Mrs. W. E. Jackson  
 McLaughlin, Mrs. M. J. Jackson  
 McLaughlin, Mrs. H. B. Jackson  
 Meads, Mrs. J. B. Jackson  
 Miller, Mrs. J. L. Jackson  
 Miller, Mrs. S. L. Jackson  
 Munro, Mrs. C. D. Jackson  
 Munro, Mrs. N. D. Jackson  
 Murphy, Mrs. B. M. Jackson  
 Myers, Mrs. J. H. Jackson  
 Newton, Mrs. R. E. Jackson  
 Oleksy, Mrs. S. P. Jackson  
 Otis, Mrs. Grant L. Jackson  
 Parker, Mrs. E. E. Leslie  
 Payne, Mrs. A. K. Jackson  
 Peterson, Mrs. E. S. Jackson  
 Phillips, Mrs. G. H. Jackson  
 Porter, Mrs. H. W. Jackson

Pray, Mrs. F. F. Jackson  
 Pray, Mrs. G. R. Jackson  
 Rice, Mrs. J. W. Jackson  
 Riley, Mrs. P. A. Jackson  
 Sargent, Mrs. Leland. Jackson  
 Sautter, Mrs. W. A. Horton  
 Schepler, Mrs. C. W. Brooklyn  
 Schmidt, Mrs. T. E. Jackson  
 Scott, Mrs. J. A. Jackson  
 Seybold, Mrs. G. A. Jackson  
 Shaeffer, Mrs. A. M. Jackson  
 Sill, Mrs. H. W. Jackson  
 Sirhal, Mrs. A. M. Brooklyn  
 Smith, Mrs. D. W. Jackson  
 Smith, Mrs. J. C. Jackson  
 Southwick, Mrs. W. A. Springport  
 Stewart, Mrs. M. N. Jackson  
 Stewart, Mrs. L. L. Jackson  
 Stone, Mrs. E. L. Jackson  
 Susskind, Mrs. M. V. Jackson  
 Tate, Mrs. C. E. Jackson  
 Taylor, Mrs. L. F. Jackson  
 Thalner, Mrs. L. F. Jackson  
 Thayer, Mrs. E. A. Jackson  
 Thompson, Mrs. Tom. Jackson  
 Thompson, Mrs. J. R. Manchester  
 Torwick, Mrs. E. T. Jackson  
 Townsend, Mrs. J. W. Vandercook Lake  
 Van Schoick, Mrs. Frank. Jackson  
 Van Schoick, Mrs. John. Hanover  
 Van Wagon, Mrs. F. L. Jackson  
 Vivirski, Mrs. E. E. Jackson  
 Wallace, Mrs. W. S. Jackson  
 Wholihan, Mrs. John. Jackson  
 Wickham, Mrs. W. A. Jackson  
 Winter, Mrs. G. E. Jackson

### Kalamazoo County

Aach, Mrs. Hugo. Kalamazoo  
 Alexander, Mrs. C. A. Kalamazoo  
 Anderson, Mrs. Glenn. Kalamazoo  
 Andrews, Mrs. Sherman. Kalamazoo  
 Appel, Mrs. Wm. Kalamazoo  
 Armstrong, Mrs. R. J. Kalamazoo  
 Banner, Mrs. L. H. Kalamazoo  
 Balch, Mrs. R. E. Kalamazoo  
 Barak, Mrs. Herbert. Kalamazoo  
 Barnabee, Mrs. James. Kalamazoo  
 Barry, Mrs. Manly. Kalamazoo  
 Bennett, Mrs. C. L. Kalamazoo  
 Bennett, Mrs. Keith. Kalamazoo  
 Birch, Mrs. Wm. Kalamazoo  
 Bergman, Mrs. Wallace. Kalamazoo  
 Betz, Mrs. Eldean. Kalamazoo  
 Beys, Mrs. C. E. Kalamazoo  
 Bond, Mrs. Glenn. Kalamazoo  
 Breneman, Mrs. James. Galesburg

Brown, Mrs. I. W. Kalamazoo  
 Burbidge, Mrs. Earl. Kalamazoo  
 Burns, Mrs. J. T. Kalamazoo  
 Cartland, Mrs. George. Kalamazoo  
 Chrest, Mrs. C. P. Kalamazoo  
 Cobb, Mrs. H. R. Kalamazoo  
 Collins, Mrs. W. E. Kalamazoo  
 Conrad, Mrs. Maynard. Kalamazoo  
 Cook, Mrs. R. G. Kalamazoo  
 Cooper, Mrs. Paul. Kalamazoo  
 Crawford, Mrs. Kenneth. Kalamazoo  
 Creager, Mrs. R. O. Kalamazoo  
 Cretsinger, Mrs. Frances. Kalamazoo  
 Crum, Mrs. Lee. Kalamazoo  
 Dana, Mrs. Robert. Kalamazoo  
 DeGroat, Mrs. Albert. Kalamazoo  
 Delbert, Mrs. Stuart. Kalamazoo  
 DeLong, Mrs. R. E. Kalamazoo  
 DenBlyker, Mrs. Walter. Kalamazoo

DePree, Mrs. H. E. Kalamazoo  
 Dew, Mrs. Robert. Kalamazoo  
 DeWitt, Mrs. Norman. Kalamazoo  
 Dowd, Mrs. Bernard. Kalamazoo  
 Doyle, Mrs. Fred. Kalamazoo  
 Estill, Mrs. Don. Kalamazoo  
 Fast, Mrs. Ralph. Kalamazoo  
 Fath, Mrs. August. Kalamazoo  
 Fopeano, Mrs. John. Kalamazoo  
 Fulkerson, Mrs. C. B. Kalamazoo  
 Fuller, Mrs. Paul. Kalamazoo  
 Fuller, Mrs. R. T. Kalamazoo  
 Gerstner, Mrs. Louis. Kalamazoo  
 Grant, Mrs. F. E. Kalamazoo  
 Green, Mrs. Wm. Kalamazoo  
 Gregg, Mrs. Sherman. Kalamazoo  
 Hailman, Mrs. H. F. Kalamazoo  
 Hammer, Mrs. John. Kalamazoo  
 Hanish, Mrs. E. Kalamazoo



# AUXILIARY ROSTER

Hayner, Mrs. Russell.....Kalamazoo  
Heersma, Mrs. H. S.....Kalamazoo  
Herbert, Mrs. Walter.....Richland  
Heyl, Mrs. F. W.....Kalamazoo  
Hildreth, Mrs. Roscoe.....Kalamazoo  
Hobbs, Mrs. E. J.....Kalamazoo  
Hoebeker, Mrs. W.....Kalamazoo  
Hout, Mrs. Wilbur.....PawPaw  
Howard, Mrs. Grant.....Kalamazoo  
Howard, Mrs. Harry.....Kalamazoo  
Hubble, Mrs. Reader.....Kalamazoo  
Irwin, Mrs. Wm.....Kalamazoo  
Jackson, Mrs. Howard.....Kalamazoo  
Jennings, Mrs. W. O.....Kalamazoo  
Kilgore, Mrs. Robert.....Kalamazoo  
Klerk, Mrs. Wm.....Kalamazoo  
Koestner, Mrs. Paul.....Kalamazoo  
Kuizenga, Mrs. Wm. H.....Kalamazoo  
Lavender, Mrs. Howard.....Kalamazoo  
Lawrence, Mrs. James.....Kalamazoo  
Littig, Mrs. John.....Kalamazoo  
MacDonald, Mrs. M. A.....Augusta  
MacGregor, Mrs. John.....Parchment  
Machin, Mrs. Harold.....Kalamazoo  
Malone, Mrs. James.....Kalamazoo  
Margolis, Mrs. Fred.....Kalamazoo

Marshall, Mrs. Don.....Kalamazoo  
Marshall, Mrs. Wm. P.....Kalamazoo  
Martens, Mrs. Irvin.....Kalamazoo  
Maxwell, Mrs. J. C.....Paw Paw  
May, Mrs. Donald.....Kalamazoo  
Moe, Mrs. Rex.....Kalamazoo  
Mortor, Mrs. R. A.....Kalamazoo  
Nell, Mrs. Edward.....Kalamazoo  
Nibbelink, Mrs. Benjamin.....Kalamazoo  
Nook, Mrs. E. J.....Kalamazoo  
Norton, Mrs. J. F.....Kalamazoo  
Osborne, Mrs. C. E.....Kalamazoo  
Patmos, Mrs. Martin.....Kalamazoo  
Patew, Mrs. Warren.....Kalamazoo  
Pearson, Mrs. O. E.....Kalamazoo  
Peelen, Mrs. Mathew.....Kalamazoo  
Peelen, Mrs. Wm.....Kalamazoo  
Perry, Mrs. C. W.....Kalamazoo  
Pratt, Mrs. F. A.....Kalamazoo  
Rigterink, Mrs. Gerald.....Kalamazoo  
Rockwell, Mrs. Donald.....Kalamazoo  
Robinson, Mrs. Fred.....Kalamazoo  
Ryan, Mrs. F. P.....Kalamazoo  
Schelton, Mrs. Roger.....Kalamazoo  
Schrier, Mrs. C. M.....Kalamazoo

Schrier, Mrs. Paul.....Kalamazoo  
Scott, Mrs. William.....Kalamazoo  
Shackleton, Mrs. W. E.....Richland  
Shepard, Mrs. B. A.....Kalamazoo  
Shook, Mrs. Ralph.....Kalamazoo  
Siemson, Mrs. W.....Kalamazoo  
Sisk, Mrs. W. N.....Kalamazoo  
Slatmeyer, Mrs. Karel.....Kalamazoo  
Snyder, Mrs. Roscoe.....Kalamazoo  
Sofen, Mrs. M. B.....Kalamazoo  
Southworth, Mrs. Maynard.....Schoolcraft  
Stiller, Mrs. Anthony.....Kalamazoo  
Stryker, Mrs. Homer.....Kalamazoo  
Upjohn, Mrs. Gifford.....Kalamazoo  
Upjohn, Mrs. L. N.....Kalamazoo  
Vander Velde, Mrs. Kenneth.....Kalamazoo  
VanUrk, Mrs. Thomas.....Kalamazoo  
Verhage, Mrs. M. D.....Kalamazoo  
Volderauer, Mrs. John.....Kalamazoo  
Warnke, Mrs. R. D.....Kalamazoo  
Wenner, Mrs. Wm.....Kalamazoo  
Westcott, Mrs. Lee.....Kalamazoo  
Wilbur, Mrs. E. P.....Kalamazoo  
Williamson, Mrs. Edwin.....Kalamazoo  
Wise, Mrs. Edwin C.....Kalamazoo  
Young, Mrs. A. S.....Kalamazoo

## Kent County

Aitken, Mrs. George T.....Grand Rapids  
Albers, Mrs. G. Donald.....Grand Rapids  
Andre, Mrs. Harvey.....Grand Rapids  
Avery, Mrs. L. Noyes.....Grand Rapids

Baert, Mrs. George H.....Grand Rapids  
Baker, Mrs. A. J.....Grand Rapids  
Ballard, Mrs. M. S.....Grand Rapids  
Balyeat, Mrs. Gordon W.....Grand Rapids  
Batts, Mrs. Martin.....Grand Rapids  
Beaton, Mrs. James.....Grand Rapids  
Beeman, Mrs. Carl.....Grand Rapids  
Beets, Mrs. W. C.....Grand Rapids  
Bell, Mrs. C. M.....Grand Rapids  
Benjamin, Mrs. Howard.....Grand Rapids  
Benson, Mrs. R. R.....Grand Rapids  
Bergsma, Mrs. Stuart.....Grand Rapids  
Bignall, Mrs. Rex.....Grand Rapids  
Blackburn, Mrs. H. M.....Grand Rapids  
Blossom, Mrs. P. W.....Grand Rapids  
Boelkins, Mrs. Richard C.....Grand Rapids  
Boersma, Mrs. Donald.....Grand Rapids  
Boet, Mrs. John T.....Grand Rapids  
Bosch, Mrs. Leon.....Grand Rapids  
Brace, Mrs. Fred C.....Grand Rapids  
Brink, Mrs. J. Russell.....Grand Rapids  
Buist, Mrs. Samuel J.....Grand Rapids  
Bull, Mrs. Frank.....Grand Rapids  
Butler, Mrs. William J.....Grand Rapids

Campbell, Mrs. Alexander M.....Grand Rapids  
Carpenter, Mrs. Luther C.....Grand Rapids  
Cayce, Mrs. William.....Grand Rapids  
Chandler, Mrs. Donald.....Grand Rapids  
Colvin, Mrs. Walter G.....Grand Rapids  
Corbus, Mrs. Burton.....Grand Rapids  
Currier, Mrs. Fred P.....Grand Rapids

Damstra, Mrs. Harold J.....Grand Rapids  
Davis, Mrs. David B.....Grand Rapids  
Dean, Mrs. Alfred.....Grand Rapids  
DeBoer, Mrs. Clarence.....Grand Rapids  
DeBoer, Mrs. Guy W.....Grand Rapids  
DeMaagd, Mrs. Gerald.....Grand Rapids  
DeMol, Mrs. Richard J.....Grand Rapids  
Denham, Mrs. Robert H.....Grand Rapids  
DePree, Mrs. Joe.....Grand Rapids  
DeVel, Mrs. Leon.....Grand Rapids  
DeVries, Mrs. Daniel.....Grand Rapids  
Dewey, Mrs. Kent.....Grand Rapids  
Diskey, Mrs. Donald G.....Grand Rapids  
Dixon, Mrs. Willis L.....Grand Rapids  
Droste, Mrs. James C.....Grand Rapids  
Ducey, Mrs. Edward F.....Grand Rapids

Eaton, Mrs. Robert M.....Grand Rapids  
Eggleston, Mrs. H. R.....Grand Rapids

Fahlund, Mrs. George T.....Grand Rapids  
Failing, Mrs. John F.....Grand Rapids  
Farber, Mrs. Charles F.....Grand Rapids  
Faust, Mrs. Lawrence W.....Grand Rapids  
Fellows, Mrs. Kenneth.....Grand Rapids  
Ferguson, Mrs. James.....Grand Rapids  
Ferguson, Mrs. Lynn A.....Grand Rapids  
Ferguson, Mrs. Ward S.....Grand Rapids  
Ferrand, Mrs. Louis G.....Grand Rapids  
Fitts, Mrs. Ralph L.....Grand Rapids  
Frantz, Mrs. Charles.....Grand Rapids  
Foshee, Mrs. J. C.....Grand Rapids  
Fuller, Mrs. E. H.....Grand Rapids

Gamm, Mrs. Kenneth.....Grand Rapids  
Gibbs, Mrs. Floyd F.....Grand Rapids  
Gillett, Mrs. O. H.....Grand Rapids  
Grant, Mrs. Lee O.....Grand Rapids  
Grass, Mrs. Edward G.....Grand Rapids  
Griffith, Mrs. Lucian S.....Grand Rapids

Haeck, Mrs. Wm.....Grand Rapids  
Hagerman, Mrs. David B.....Grand Rapids  
Hake, Mrs. Wm. F.....Grand Rapids  
Hayes, Sr., Mrs. Lawrence.....Grand Rapids  
Heetderks, Mrs. Dewey R.....Grand Rapids  
Henry, Mrs. James.....Grand Rapids  
Hill, Mrs. A. Morgan.....Grand Rapids  
Hodgen, Mrs. John T.....Grand Rapids  
Holcomb, Mrs. J. Winslow.....Grand Rapids  
Hollander, Mrs. Stephen.....Grand Rapids  
Hufford, Mrs. Alvin R.....Grand Rapids  
Hyland, Mrs. Wm. A.....Grand Rapids  
Irwin, Mrs. Thomas C.....Grand Rapids

Jamison, Mrs. Fred.....Grand Rapids  
Jarvis, Mrs. Charles.....Grand Rapids  
Jaracz, Sr., Mrs. Walter J.....Grand Rapids  
Jellema, Mrs. John.....Grand Rapids  
Johnston, Mrs. Wm.....Grand Rapids  
Jones, Mrs. Horace.....Grand Rapids

Kelly, Mrs. Edward.....Grand Rapids  
Kemmer, Mrs. Thomas.....Grand Rapids  
Klaus, Mrs. C. D.....Grand Rapids  
Kniskern, Mrs. Paul W.....Grand Rapids  
Kooistra, Mrs. Henry P.....Grand Rapids  
Kreulen, Mrs. H. J.....Grand Rapids  
Krupp, Mrs. Christian.....Grand Rapids

Lentini, Mrs. Joseph R.....Grand Rapids  
Liefers, Mrs. Harry.....Grand Rapids  
List, Mrs. Carl F.....Grand Rapids

MacIntyre, Mrs. Dugal D.....Grand Rapids  
Marsh, Mrs. John P.....Grand Rapids  
Martinus, Mrs. Martin.....Grand Rapids  
Maurits, Mrs. Reuber.....Grand Rapids  
McCandless, Mrs. Robert J.....Grand Rapids  
McCormick, Mrs. John K.....Grand Rapids  
McDougal, Mrs. Wm. J.....Grand Rapids  
McKenna, Mrs. Joseph L.....Grand Rapids  
McKinley, Mrs. Leland M.....Grand Rapids  
Meade, Jr., Mrs. Richard H.....Grand Rapids

Miller, Mrs. J. Duane.....Grand Rapids  
Miller, Mrs. J. J.....Grand Rapids  
Mitchell, Mrs. W. B.....Grand Rapids  
Moleski, Mrs. Joseph V.....Grand Rapids  
Moleski, Mrs. Leo T.....Grand Rapids  
Moll, Mrs. A. M.....Grand Rapids  
Mouw, Mrs. Dirk.....Grand Rapids  
Mulder, Mrs. Jacob.....Grand Rapids  
Murphy, Mrs. Miles.....Grand Rapids

Northouse, Mrs. Peter B.....Grand Rapids  
Notier, Mrs. Victor.....Grand Rapids

Oliver, Mrs. W. W.....Grand Rapids  
Paalman, Mrs. Russell.....Grand Rapids  
Patterson, Mrs. P. W.....Grand Rapids  
Payne, Mrs. C. Allen.....Grand Rapids  
Pearson, Mrs. Glenn.....Grand Rapids  
Plekker, Mrs. J. D.....Grand Rapids  
Pott, Mrs. Abraham L.....Grand Rapids

Pyle, Mrs. Henry J.....Grand Rapids

Quirk, Mrs. Edmund J.....Grand Rapids

Ralph, Mrs. L. Paul.....Grand Rapids  
Rasmussen, Mrs. R. A.....Grand Rapids  
Reed, Mrs. Torrance.....Grand Rapids  
Reus, Mrs. Wm. F.....Grand Rapids  
Rigterink, Mrs. John W.....Grand Rapids  
Riley, Mrs. George L.....Grand Rapids  
Robinson, Mrs. Harold G.....Grand Rapids  
Rodgers, Mrs. Wm. L.....Grand Rapids  
Rosenzweig, Mrs. Leonard.....Grand Rapids  
Roth, Mrs. Emil M.....Grand Rapids  
Ryan, Mrs. John.....Grand Rapids

Schaubel, Mrs. H. J.....Grand Rapids  
Schnoor, Mrs. Elmer W.....Grand Rapids  
Schuitema, Mrs. Donald M.....Grand Rapids  
Sevensma, Mrs. Elisha S.....Grand Rapids  
Sevey, Mrs. Leon E.....Grand Rapids  
Shellman, Mrs. M. W.....Grand Rapids  
Shepard, Mrs. B. H.....Grand Rapids  
Sherwood, Mrs. J. Vincent.....Grand Rapids  
Sidell, Mrs. Chester.....Grand Rapids  
Sidell, Mrs. Richard.....Grand Rapids  
Slemmons, Mrs. C. G.....Grand Rapids  
Sluyter, Mrs. J. Stanley.....Grand Rapids  
Smith, Mrs. A. B.....Grand Rapids  
Smith, Mrs. R. Earle.....Grand Rapids  
Smith, Mrs. Robert B.....Grand Rapids  
Snapp, Mrs. Carl F.....Grand Rapids  
Snyder, Mrs. Clarence.....Grand Rapids  
Southwick, Mrs. G. Howard.....Grand Rapids

Steffensen, Mrs. Wallace H.....Grand Rapids

Stonehouse, Mrs. Garnet G.....Grand Rapids  
Stover, Mrs. Virgil E.....Grand Rapids  
Stuart, Mrs. G. J.....Grand Rapids  
Swenson, Mrs. Harold C.....Grand Rapids

Ten Have, Mrs. John.....Grand Rapids  
Tesseine, Mrs. Arthur J.....Grand Rapids  
Thompson, Mrs. Edward C.....Grand Rapids  
Thompson, Mrs. Frank D.....Grand Rapids  
Thomson, Mrs. John.....Grand Rapids  
Tiffany, Mrs. Joseph C.....Grand Rapids  
Torgerson, Mrs. William R.....Grand Rapids  
Truog, Mrs. Clarence P.....Grand Rapids

Van Belois, Mrs. Harvard.....Grand Rapids  
VanBree, Mrs. Raymond.....Grand Rapids  
VanDuine, Mrs. Henry.....Grand Rapids  
VanNoord, Mrs. Gelmer.....Grand Rapids  
VanPernis, Mrs. Paul A.....Grand Rapids  
VanWoerkom, Mrs. Daniel.....Grand Rapids  
VanZwalenburg, Mrs. Benjamin.....Grand Rapids

Veldman, Mrs. Harold E.....Grand Rapids  
Venema, Mrs. Jay R.....Grand Rapids  
Vis, Mrs. Wm. R.....Grand Rapids

Wells, Mrs. Merrill.....Grand Rapids  
Webb, Mrs. R. F.....Grand Rapids  
Wenger, Mrs. A. Verna.....Grand Rapids  
Wenger, Mrs. John N.....Grand Rapids  
Whinery, Mrs. Joseph B.....Grand Rapids  
Willits, Mrs. Paul W.....Grand Rapids  
Winter, Mrs. Garrett E.....Grand Rapids  
Wurz, Mrs. John Frederick.....Grand Rapids



## AUXILIARY ROSTER

### Macomb County

Banting, Mrs. Oswald F.....Richmond  
Barker, Mrs. John G.....St. Clair Shores  
Bower, Mrs. Allen B.....Armada  
Brady, Mrs. Milo J.....Detroit  
Bryce, Mrs. James W.....Centerline  
Buckley, Mrs. Daniel J.....Mt. Clemens  
Crawford, Mrs. Alphonse M.....Romeo  
Croman, Jr., Mrs. Joseph M.....Mt. Clemens  
Dudzinski, Mrs. Edmund J.....New Baltimore  
Engels, Mrs. John A.....Richmond

Heine, Mrs. Austin W.....Mt. Clemens  
Juliar, Mrs. Joseph F.....Mt. Clemens  
Kane, Mrs. William J.....Mt. Clemens  
Moore, Mrs. George F.....Mt. Clemens  
Mulligan, Mrs. Philip T.....Mt. Clemens  
Reichman, Mrs. Joseph J.....Mt. Clemens  
Reitzel, Mrs. Rufus H.....Mt. Clemens  
Revere, Mrs. Joseph O.....Mt. Clemens  
Rivard, Mrs. Charles F.....St. Clair Shores  
Rothman, Mrs. Arthur M.....East Detroit  
Ruedisueli, Mrs. Clarence A.....Detroit  
Salot, Mrs. Russell F.....Mt. Clemens  
Scher, Mrs. Joseph N.....Mt. Clemens

Scher, Mrs. Sydney.....Mt. Clemens  
Seigfried, Mrs. Edward G.....New Haven  
Suizer, Mrs. Nelson.....East Detroit  
Smith, Mrs. Milton C.....Mt. Clemens  
Stryker, Mrs. Oscar D.....St. Clair Shores  
Strum, Mrs. Fredrick A.....St. Clair Shores  
Thompson, Mrs. Alfred A.....Mt. Clemens  
Ulrich, Mrs. Russell W.....Mt. Clemens  
Willard, Mrs. Henry C.....New Baltimore  
Whitley, Mrs. Alec.....St. Clair Shores  
Wiley, Mrs. Duncan B.....Utica  
Wolfson, Mrs. Victor H.....Mt. Clemens

### Manistee County

Dart, Mrs. Stella.....Manistee  
Grant, Mrs. C. L.....Manistee  
Hansen, Mrs. E. C.....Manistee  
Jensen, Mrs. Dorothy.....Manistee  
Konopa, Mrs. J. F.....Manistee

Lewis, Mrs. Lee A.....Manistee  
McLarty, Mrs. Madge.....Manistee  
Miller, Mrs. E. B.....Manistee  
Norconk, Mrs. Ward.....Manistee  
Oakes, Mrs. E. A.....Manistee

Ogilvie, Mrs. G. D.....Manistee  
Quinn, Mrs. H.....Manistee  
Ramsdell, Mrs. H. A.....Manistee  
Ramsdell, Mrs. Louise.....Manistee  
Rowe, Mrs. R. E.....Manistee

### Mason County

Boldyreff, Mrs. E. E.....Custer  
Hoffman, Mrs. H. B.....Ludington  
Lintner, Mrs. R. C.....Ludington

Martin, Mrs. W. S.....Ludington  
Ostrander, Mrs. R. A.....Ludington  
Paukstis, Mrs. C. A.....Ludington  
Scott, Mrs. R. R.....Scottville

Slaybaugh, Mrs. J. C.....Ludington  
Spencer, Mrs. C. A.....Scottville  
Switzer, Mrs. G. O.....Ludington

### Mecosta-Osceola-Lake Counties

Bruggema, Mrs. Jacob.....Evert  
Campbell, Mrs. J. B.....Big Rapids  
Chess, Mrs. Leo.....Reed City  
Franklin, Mrs. Benjamin.....Remus  
Ivkovich, Mrs. Paul.....Reed City  
Kelsey, Mrs. Lee F.....Lakeview  
Kilmer, Mrs. David.....Reed City

Kilmer, Mrs. Paul B.....Reed City  
Kowaleski, Mrs. Edward.....Remus  
Marston, Mrs. L. L.....Lakeview  
McEwen, Mrs. Mary.....Big Rapids  
McIntyre, Mrs. Donald.....Big Rapids  
Merlo, Mrs. Frank A.....Big Rapids  
Miller, Mrs. Charles S.....Big Rapids

Mitchell, Mrs. Harold C.....Big Rapids  
Nelson, Mrs. Lorenzo.....Baldwin  
Peck, Mrs. Louis K.....Barryton  
Treyner, Mrs. Thomas P.....Big Rapids  
VanAuken, Mrs. Edward.....Big Rapids  
White, Mrs. J. A.....Big Rapids  
Yeo, Mrs. Gordon.....Big Rapids

### Midland County

Ballmer, Mrs. Robert.....Midland  
Bowsher, Mrs. Robert.....Midland  
Bulmer, Mrs. Dan J.....Midland  
Buskirk, Mrs. Maurice.....Midland  
Carson, Mrs. Ada (associate).....Midland  
Dougher, Mrs. Ellen (associate).....Midland  
Gay, Mrs. Harold.....Midland

Gordon, Mrs. Harold.....Midland  
Gronemeyer, Mrs. William.....Midland  
High, Mrs. Florence (associate).....Midland  
Howe, Mrs. Irvin.....Midland  
Ittner, Mrs. Martin.....Midland  
Lansborough, Mrs. Hester.....Midland  
Linsenman, Mrs. Karl.....Midland  
MacCallum, Mrs. Charles.....Midland

Maynard, Mrs. William.....Midland  
Meisel, Mrs. Edward.....Midland  
Pike, Mrs. Melvin.....Midland  
Poznak, Mrs. Leonard.....Midland  
Rice, Mrs. Robert.....Midland  
Sherk, Mrs. J. H.....Midland  
Sjvlander, Mrs. G. (associate).....Midland

### Muskegon County

Beers, Mrs. Charles.....Muskegon  
Boyd, Mrs. Devere.....Muskegon  
Bradshaw, Mrs. Park.....North Muskegon  
Clark, Mrs. Harry.....Muskegon  
Clapp, Mrs. Henry.....Muskegon  
Gillard, Mrs. James.....Muskegon

Griffith, Mrs. Robert.....Muskegon  
Guikema, Mrs. E.....North Muskegon  
Heneveld, Mrs. Edward.....Muskegon  
Heneveld, Mrs. John.....Muskegon  
Loder, Mrs. L. L.....Muskegon  
Medema, Mrs. Paul.....Muskegon  
Risk, Mrs. Robert.....Muskegon

Stone, Mrs. Betty ..... Muskegon  
Thomas, Mrs. Edward.....Glenside  
Prentice, Mrs. Edwin.....Muskegon  
Wagenaar, Mrs. Edward.....Muskegon  
Wiersma, Mrs. Silas.....Muskegon  
Wilson, Mrs. Pitt.....Muskegon

### Newaygo County

Black, Mrs. Lulu.....?  
Geerlings, Mrs. Lambert J.....Fremont  
Geerlings, Mrs. Willis.....Fremont

Harris, Mrs. Dean W.....Fremont  
Klein, Mrs. J. Paul.....Fremont

Masters, Mrs. Brooker L.....Fremont  
O'Neill, Mrs. John W.....White Cloud  
Tompsett, Mrs. Arthur.....Hesperia

### Oakland County

Abbott, Mrs. Vernon C.....Pontiac  
Bannow, Mrs. Robert J.....Pontiac  
Blakeney, Mrs. James R.....Auburn Heights  
Bradley, Mrs. E. L.....Pontiac  
Christie, Mrs. J. W.....Pontiac  
Cobb, Mrs. Leon J.....Pontiac  
Collins, Mrs. E. F.....Pontiac  
Crissman, Mrs. H. G.....Ferndale  
Endress, Mrs. Z. F.....Pontiac  
Gehring, Mrs. N. F.....Pontiac  
Gerls, Mrs. Frank B.....Pontiac  
German, Mrs. Nettie L.....Pontiac

Hackett, Mrs. D. J.....Pontiac  
Haddock, Mrs. D. A.....Pontiac  
Harsh, Mrs. Robert C.....Pontiac  
Howlett, Mrs. E. V.....Pontiac  
Hoyt, Mrs. D. F.....Pontiac  
Hubert, Mrs. John R.....Pontiac  
Kemp, Mrs. F. J.....Pontiac  
Markley, Mrs. John M.....Pontiac  
Mehas, Mrs. C. P.....Pontiac  
Miller, Mrs. Hazen.....Detroit  
Neafie, Mrs. C. A.....Pontiac  
Olsen, Mrs. Richard E.....Pontiac

Petroff, Mrs. G. N.....Pontiac  
Russell, Mrs. V. P.....Pleasant Ridge  
Ruva, Mrs. Joseph J.....Pontiac  
Schuneman, Mrs. Howard A.....Royal Oak  
Seaborn, Mrs. J. A.....Royal Oak  
Smith, Mrs. Donald S.....Pontiac  
Spohn, Mrs. Earl.....Royal Oak  
Stageman, Mrs. John C.....Clarkston  
Stanley, Mrs. William F.....Pleasant Ridge  
Sutton, Mrs. Palmer E.....Royal Oak  
VanHaltem, Mrs. H. L.....Pontiac  
Williams, Mrs. John P.....Pontiac



## AUXILIARY ROSTER

### Ottawa County

Barrett, Mrs. C.....Grand Haven  
Beernink, Mrs. E.....Grand Haven  
Bloemendaal, Mrs. D.....Zeeland  
Bloemendaal, Mrs. W.....Grand Haven  
Boone, Mrs. C.....Zeeland  
Bos, Mrs. G.....  
Bulthuis, Mrs. Jerry.....Jamestown  
Clark, Mrs. N. H.....Holland  
Cook, Mrs. C.....Holland  
DeVries, Mrs. H.....Holland  
DeYoung, Mrs. F.....Spring Lake

Groat, Mrs. F.....Grand Haven  
Hager, Mrs. R.....Hudsonville  
Hamilink, Mrs. M.....Holland  
Harms, Mrs. H.....Holland  
Kemmer, Mrs. G.....Zeeland  
Kools, Mrs. W.....Holland  
Leenhouts, Mrs. A.....Holland  
Long, Mrs. C.....Grand Haven  
Nykamp, Mrs. R.....Zeeland  
Presley, Mrs. W.....Grand Haven  
Rypkema, Mrs. W.....Grand Haven  
Schaftenaar, Mrs. R.....Holland

Tappen, Mrs. W.....  
Ten Have, Mrs. R.....Grand Haven  
Timmerman, Mrs. E. C.....Coopersville  
VanAppledorn, Mrs. C.....Holland  
VanderBerg, Mrs. E.....Holland  
VanderVelde, Mrs. O.....Holland  
VanKolken, Mrs. P.....Grand Haven  
Wells, Mrs. K. N.....Spring Lake  
Westrate, Mrs. W.....Holland  
Winter, Mrs. J. K.....Holland  
Winter, Mrs. W. G.....Holland

### Saginaw County

Ackerman, Mrs. G. L.....Saginaw  
Anderson, Mrs. W. K.....Saginaw  
Bagshaw, Mrs. D. E.....Saginaw  
Bishop, Mrs. H. M.....Saginaw  
Brook, Mrs. W. H.....Saginaw  
Bruton, Mrs. M. F.....Saginaw  
Bucklin, Mrs. R. V.....Saginaw  
Bullington, Mrs. B. M.....Saginaw  
Busch, Mrs. F. J.....Saginaw  
Butler, Mrs. M. G.....Saginaw  
Button, Mrs. A. C.....Saginaw  
Cady, Mrs. F. J.....Saginaw  
Cameron, Mrs. A. K.....Saginaw  
Campbell, Mrs. L. A.....Saginaw  
Chisena, Mrs. P. R.....Saginaw  
Claytor, Mrs. A. A.....Saginaw  
Cortopassi, Mrs. A. J.....Saginaw  
Cortopassi, Mrs. V. E.....Saginaw  
Cory, Mrs. C. W.....Saginaw  
Curtis, Mrs. J. H.....Saginaw  
Durman, Mrs. D. C.....Saginaw  
Ely, Mrs. C. W.....Saginaw  
Ernst, Mrs. A. R.....Saginaw  
Gage, Mrs. D. P.....Saginaw  
Galsterer, Mrs. E. C.....Saginaw  
Gardner, Mrs. J. H.....Saginaw  
Gomon, Mrs. L. D.....Saginaw  
Grigg, Mrs. A. P.....Saginaw  
Hand, Mrs. E. A.....Saginaw  
Harvie, Mrs. L. C.....Saginaw  
Heavenrich, Mrs. R. M.....Saginaw  
Helmkamp, Mrs. H. O.....Saginaw  
Hester, Mrs. E. G.....Saginaw  
Hill, Mrs. V. L.....Saginaw  
Howell, Mrs. D. M.....Saginaw  
Hubinger, Mrs. H. L.....Saginaw

Jaenichen, Mrs. Robert.....Saginaw  
James, Mrs. J. W.....Saginaw  
Jiroch, Mrs. R. S.....Saginaw  
Kemp, Mrs. J. N.....Saginaw  
Kempston, Mrs. R. M.....Saginaw  
Kerr, Mrs. W. B.....Saginaw  
Keyes, Mrs. J. T.....Saginaw  
Kolesar, Mrs. R. C.....Saginaw  
Kowals, Mrs. F. V.....Saginaw  
LaPorte, Mrs. L. A.....Saginaw  
Leitch, Mrs. A. E.....Saginaw  
Lohr, Mrs. O. W.....Saginaw  
Luger, Mrs. F. E.....Saginaw  
Lurie, Mrs. R. I.....Saginaw  
Lyle, Mrs. R. C.....Saginaw  
McKinney, Mrs. A. R.....Saginaw  
McLanndress, Mrs. J. A.....Saginaw  
MacKinnon, Mrs. E. D.....Saginaw  
MacMeekin, Mrs. J. W.....Saginaw  
Manning, Mrs. J. E.....Saginaw  
Markey, Mrs. J. P.....Saginaw  
Markey, Mrs. F. L.....Saginaw  
Martowka, Mrs. W. P.....Saginaw  
Mathews, Mrs. H. C.....Saginaw  
Maurer, Mrs. J. A.....Saginaw  
Mayne, Mrs. H. E.....Saginaw  
Meyer, Mrs. H. J.....Saginaw  
Moon, Mrs. A. R.....Saginaw  
Morgrette, Mrs. L. J.....Saginaw  
Morris, Mrs. K. M.....Saginaw  
Mudd, Mrs. R. D.....Saginaw  
Murphy, Mrs. A. P.....Saginaw  
Murray, Mrs. C. R.....Saginaw  
Murray, Mrs. M. J.....Saginaw  
Nelson, Mrs. O. A.....Saginaw  
Northway, Mrs. R. O.....Saginaw

Novy, Mrs. F. O.....Saginaw  
Olson, Mrs. C. P.....Saginaw  
Ostrander, Mrs. F. W.....Saginaw  
O'Rielly, Mrs. William.....Saginaw  
Phillips, Mrs. H. A.....Saginaw  
Pietz, Mrs. Fred.....Saginaw  
Poole, Mrs. F. A.....Saginaw  
Potvin, Mrs. C. D.....Saginaw  
Richards, Mrs. N. W.....Saginaw  
Richter, Mrs. E. P.....Saginaw  
Richter, Mrs. H. J.....Saginaw  
Roggen, Mrs. I. J.....Saginaw  
Ryan, Mrs. M. D.....Saginaw  
Ryan, Mrs. R. S.....Saginaw  
Sample, Mrs. J. T.....Saginaw  
Sargent, Mrs. D. V.....Saginaw  
Schaiberger, Mrs. E. G.....Saginaw  
Schultz, Mrs. F. R.....Saginaw  
Sharp, Mrs. M. C.....Saginaw  
Sheldon, Mrs. S. A.....Saginaw  
Siler, Mrs. D. E.....Saginaw  
Skowronski, Mrs. C. A.....Saginaw  
Slack, Mrs. W. K.....Saginaw  
Stahly, Mrs. E. H.....Saginaw  
Stander, Mrs. A. C.....Saginaw  
Stewart, Mrs. G. W.....Saginaw  
Thompson, Mrs. A. B.....Saginaw  
Tiedke, Mrs. G. E.....Saginaw  
Topp, Mrs. E. W.....Saginaw  
Toshach, Mrs. C. E.....Saginaw  
Volk, Mrs. V. K.....Saginaw  
Watson, Mrs. Roy.....Saginaw  
Weeks, Mrs. E. G.....Saginaw  
Westlund, Mrs. Norman.....Saginaw  
Wright, Mrs. E. M.....Saginaw  
Yntema, Mrs. Stuart.....Saginaw

### St. Clair County

Banting, Mrs. Kenneth C.....Port Huron  
Beck, Mrs. Frank K.....Port Huron  
Beer, Mrs. Joseph F.....St. Clair  
Benjamin, Mrs. Clayton C.....Port Huron  
Borden, Mrs. Charles L.....Port Huron  
Bottomley, Mrs. Thomas H.....Port Huron  
Boughner, Mrs. Walter F.....Algonac  
Bovee, Mrs. M. E.....Port Huron  
Burley, Mrs. Jacob H.....Port Huron  
Callery, Mrs. Albert L.....Port Huron  
Clyne, Mrs. B. C.....Yale  
Dickelman, Mrs. Lorin E.....Port Huron  
Fitzgerald, Mrs. E. W.....Port Huron

Gilmore, Mrs. John R.....Port Huron  
Hazledine, Mrs. H. J.....Port Huron  
Holcomb, Mrs. Russell J.....Marine City  
Hoyt, Mrs. Charles M.....Port Huron  
Kahn, Mrs. Oscar.....Capac  
Kimball, Mrs. F. B.....Port Huron  
Lauridsen, Mrs. James.....Port Huron  
LeGalley, Mrs. Kenneth B.....Port Huron  
Licker, Mrs. Reuben R.....Marysville  
Ludwig, Mrs. Claude A.....Port Huron  
Ludwig, Mrs. Fred E.....Port Huron  
Martin, Mrs. Clyde A.....Port Huron  
Meredith, Mrs. Evert W.....Port Huron

Novak, Mrs. Walter S.....Port Huron  
Patterson, Mrs. Dorsey W.....Port Huron  
Pollock, Mrs. Donald A.....Port Huron  
Ryerson, Mrs. William W.....Port Huron  
Sanderson, Mrs. Joseph L.....Port Huron  
Schaefer, Mrs. Waldo A.....Port Huron  
Sies, Mrs. Edgar C.....Port Huron  
Thomas, Mrs. Charles F.....Port Huron  
Treadgold, Mrs. Douglas.....Port Huron  
Wass, Mrs. H. C.....St. Clair  
Waters, Mrs. George.....Port Huron  
Wetzel, Mrs. John O.....St. Clair  
Wheeler, Mrs. Margaret.....Port Huron

### St. Joseph County

Berg, Mrs. L. A.....Sturgis  
Blood, Mrs. J. V.....Three Rivers  
Braham, Mrs. W. G.....Sturgis  
Brunson, Mrs. A. E.....Sturgis  
Emory, Mrs. Blanche.....Sturgis  
Fiegl, Mrs. S. A.....Sturgis  
Fortner, Mrs. R. J.....Three Rivers  
Gillespie, Mrs. Gerlie.....Sturgis  
Hoekman, Mrs. Aben.....Constantine

Kane, Mrs. D. M.....Sturgis  
McGrath, Mrs. Neill B.....Three Rivers  
Miller, Mrs. C. G.....Sturgis  
Myer, Mrs. Clifton G.....Colon  
Parrish, Mrs. M. F.....Sturgis  
Pennington, Mrs. H. C.....White Pigeon  
Penzotti, Mrs. S. C.....Three Rivers  
Porter, Mrs. C. G.....Three Rivers

Reed, Mrs. F. R.....Three Rivers  
Robinson, Mrs. Fred.....Sturgis  
Shaw, Mrs. G. D.....Three Rivers  
Sheldon, Mrs. J. P.....Sturgis  
Slote, Mrs. L. K.....Constantine  
Springer, Mrs. R. A.....Centreville  
Tesar, Mrs. F. J.....Centreville  
Weir, Mrs. D. C.....Three Rivers  
Zimont, Mrs. R. D.....Constantine

### Tuscola County

Adams, Mrs. Dewitt C.....Caro  
Ballard, Mrs. James.....Cass City  
Berman, Mrs. Harry.....Millington  
Cook, Mrs. Raymond.....Akron  
Dickerson, Mrs. Willard.....Caro  
Dixon, Mrs. R. R.....Caro

Donahue, Mrs. H. T.....Cass City  
Flett, Mrs. Richard.....Millington  
Gugino, Mrs. Frank.....Reese  
Howlett, Mrs. Robert.....Caro  
Merrill, Mrs. E.....Caro  
Morris, Mrs. Frank.....Cass City  
Nigg, Mrs. Herbert.....Caro

Pelczar, Mrs. Walter.....Unionville  
Ruskin, Mrs. D. B.....Caro  
Savage, Mrs. Lloyd.....Caro  
Shoemaker, John.....Vassar  
Starmann, Mrs. Bernard.....Cass City  
Swanson, Mrs. E. C.....Vassar



# AUXILIARY ROSTER

## Washtenaw County

Barker, Mrs. Paul.....Ann Arbor  
 Barr, Mrs. A. S.....Ann Arbor  
 Bassow, Mrs. Paul.....Ann Arbor  
 Beebe, Mrs. Hugh M.....Ann Arbor  
 Belote, Mrs. G. H.....Ann Arbor  
 Cawley, Mrs. Edward.....Ann Arbor  
 Cheney, Mrs. William.....Ann Arbor  
 Clarke, Mrs. Robert.....Ann Arbor  
 Collier, Mrs. Frederick.....Ann Arbor  
 Crook, Mrs. Clarence.....Ann Arbor  
 Cummings, Mrs. Howard H.....Ann Arbor  
 Curtis, Mrs. Arthur C.....Ann Arbor  
 DeJong, Mrs. Russell.....Ann Arbor  
 DeTar, Mrs. J. S.....Milan  
 Dingman, Mrs. Reed.....Ann Arbor  
 Dolfin, Mrs. W. E.....Ann Arbor  
 Engleke, Mrs. Otto.....Ann Arbor  
 Falls, Mrs. Harold F.....Ann Arbor  
 Fink, Mrs. George.....Ann Arbor  
 Fralick, Mrs. Bruce.....Ann Arbor  
 Frye, Mrs. Carl.....Ann Arbor  
 Furstenberg, Mrs. Albert C.....Ann Arbor  
 Frost, Mrs. Lyle.....Ann Arbor  
 Ganzhorn, Mrs. Edwin C.....Ann Arbor  
 Gates, Mrs. John.....Ann Arbor

Gates, Mrs. Neil.....Ann Arbor  
 Gotz, Mrs. Alexander.....Ann Arbor  
 Greenway, Mrs. Guerdon.....Ann Arbor  
 Haas, Mrs. Reynold.....Ann Arbor  
 Hagerman, Mrs. George.....Ann Arbor  
 Harris, Mrs. Bradley.....Ann Arbor  
 Harris, Mrs. Scott.....Ann Arbor  
 Henderson, Mrs. John.....Ann Arbor  
 Himler, Mrs. Leonard.....Ann Arbor  
 Hodges, Mrs. F. J.....Ann Arbor  
 House, Mrs. F. B.....Ann Arbor  
 Howard, Mrs. S. C.....Ann Arbor  
 Hunsberger, Mrs. W. G.....Ann Arbor  
 Kambly, Mrs. A. H.....Ann Arbor  
 Keene, Mrs. Clifford.....Ann Arbor  
 Kemper, Mrs. John.....Ann Arbor  
 LaFever, Mrs. S. L.....Ann Arbor  
 Law, Mrs. John.....Ann Arbor  
 Marshall, Mrs. Mark.....Ann Arbor  
 Martin, Mrs. D. W.....Ann Arbor  
 Maxwell, Mrs. J. H.....Ann Arbor  
 McCotter, Mrs. Rollo.....Ann Arbor  
 Milford, Mrs. Albert.....Ann Arbor  
 Muehlig, Mrs. George F.....Ann Arbor  
 Meyers, Mrs. Dean W.....Ann Arbor  
 Newton, Mrs. C. W.....Ann Arbor

Patterson, Mrs. R. M.....Ann Arbor  
 Ratliff, Mrs. R. K.....Ann Arbor  
 Riecker, Mrs. Herman.....Ann Arbor  
 Riggs, Mrs. Harold.....Ann Arbor  
 Ross, Mrs. Howard C.....Ann Arbor  
 Sayre, Mrs. George.....Ann Arbor  
 Scoville, Mrs. Henry.....Ann Arbor  
 Seever, Mrs. M. H.....Ann Arbor  
 Seime, Mrs. Reuben.....Ann Arbor  
 Sheldon, Mrs. John.....Ann Arbor  
 Sink, Mrs. Emory.....Ann Arbor  
 Slocum, Mrs. George.....Ann Arbor  
 Spears, Mrs. Clarence.....Ann Arbor  
 Sturgis, Mrs. C. C.....Ann Arbor  
 Teed, Mrs. R. W.....Ann Arbor  
 Thieme, Mrs. E. T.....Ann Arbor  
 Towsley, Mrs. Harry.....Ann Arbor  
 Waggoner, Mrs. Raymond.....Ann Arbor  
 Wessinger, Mrs. John.....Ann Arbor  
 Williams, Mrs. Howard.....Ann Arbor  
 Williamson, Mrs. F. B.....Ann Arbor  
 Wilson, Mrs. James.....Ann Arbor  
 Woods, Mrs. J. J.....Ann Arbor  
 Zafafonietis, Mrs. Chris.....Ann Arbor  
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 Akroyd, Mrs. C. A.....Detroit  
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 Alles, Mrs. Russel W.....Detroit  
 Amos, Mrs. T. Grover.....Detroit  
 Anderson, Mrs. Bruce.....Pontiac  
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 Ashley, Mrs. L. Byron.....Detroit  
 Athay, Mrs. Roland M.....Eloise  
 Auble, Mrs. M. E.....Detroit  
 August, Mrs. Harry E.....Huntington Woods  
 Nelson, Mrs. A. U.....Detroit  
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 Babcock, Mrs. W. W.....Detroit  
 Bach, Mrs. Walter F.....Dearborn  
 Baer, Mrs. George.....Detroit  
 Bagley, Mrs. Harry E.....Dearborn  
 Bailey, Mrs. C. C.....Detroit  
 Bailey, Mrs. L. J.....Detroit  
 Balcerski, Mrs. Matthew.....Detroit  
 Barnett, Mrs. Edwin Dwight.....Detroit  
 Barone, Mrs. Charles J.....Highland Park  
 Barrett, Mrs. Wyman D.....Grosse Pointe  
 Bartemeier, Mrs. Leo.....Grosse Pointe  
 Bates, Mrs. W. M.....Detroit  
 Bauer, Mrs. Lester E.....Detroit  
 Baumgarten, Mrs. E. C.....Grosse Pointe  
 Beach, Mrs. Watson.....Grosse Pointe  
 Beam, Mrs. A. Duane.....Grosse Pointe  
 Beaton, Mrs. Colin.....Pleasant Ridge  
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 Bell, Mrs. J. Kenner.....Highland Park  
 Bentley, Mrs. Neil.....Detroit  
 Berlien, Mrs. Evan C.....Detroit  
 Best, Mrs. Edward.....Grosse Pointe  
 Blain, Mrs. Alexander.....Grosse Pointe  
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 Bookmyer, Mrs. Ralph H.....Detroit  
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 Brady, Mrs. H. A.....River Rouge  
 Brines, Mrs. Osborne A.....Detroit  
 Bringard, Mrs. Elmer.....Detroit  
 Brooks, Mrs. Clark D.....Detroit  
 Brough, Mrs. Glen A.....Grosse Ile  
 Brown, Mrs. Audrey O.....Detroit  
 Brown, Mrs. Gordon T.....Detroit  
 Brown, Mrs. Harvey F.....Detroit  
 Brown, Mrs. Henry S.....Detroit  
 Buesser, Mrs. Frederick G.....Detroit  
 Burgess, Mrs. C. M.....Pleasant Ridge  
 Calkins, Mrs. H. Neill.....Detroit  
 Callaghan, Mrs. Thomas T.....Detroit  
 Campau, Mrs. George.....Detroit  
 Campbell, Mrs. Mac D.....Pleasant Ridge  
 Candler, Mrs. Clarence L.....Detroit  
 Carpenter, Mrs. Claire H.....Highland Park  
 Carter, Mrs. John M.....Detroit  
 Carter, Mrs. Leland F.....Detroit  
 Cavell, Mrs. R. W.....Dearborn  
 Chall, Mrs. Henry G.....Detroit  
 Chance, Mrs. Jos. H.....Detroit  
 Christensen, Mrs. C. A.....Dearborn  
 Clark, Mrs. Harold E.....Detroit  
 Clifford, Mrs. John E.....Detroit  
 Clifford, Mrs. T. P.....Detroit  
 Clinton, Mrs. Wm. R.....Detroit  
 Coates, Mrs. C. A.....Dearborn  
 Cohoe, Mrs. D. A.....Detroit  
 Cole, Mrs. Jas. E.....Detroit  
 Connelly, Mrs. Richard C.....Grosse Pointe  
 Connors, Mrs. John J.....Detroit  
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Cooksey, Mrs. Warren B.....Detroit  
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 Cooper, Mrs. E. L.....Detroit  
 Corbett, Mrs. John J.....Grosse Pointe  
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 Cotruro, Mrs. Louis D.....Grosse Pointe  
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 Darling, Mrs. Milton A.....Detroit  
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 Dawson, Mrs. W. A.....Inkster  
 Delaney, Mrs. Jos. H.....North Carolina  
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 DeNike, Mrs. A. James.....Detroit  
 Denis, Mrs. G. M.....Detroit  
 Denis, Mrs. Melvin S.....Detroit  
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 Eisman, Mrs. Clarence H.....Detroit  
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 Ewing, Mrs. C. H.....Grosse Pointe  
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 Felcyn, Mrs. W. G.....Detroit  
 Fellers, Mrs. R. L.....Detroit  
 Fenton, Mrs. Russell.....Detroit  
 Fenton, Mrs. Stanley C.....Detroit  
 Fisher, Mrs. C. L.....Grosse Pointe  
 Fisher, Mrs. George.....Detroit  
 Fitzgerald, Mrs. I. M.....Detroit  
 Flaherty, Mrs. Norman W.....Dearborn  
 Flaherty, Mrs. Samuel A.....Detroit  
 Foote, Mrs. Jas. A.....Lincoln Park  
 Ford, Mrs. G. A.....Detroit  
 Foster, Mrs. Wm. L.....Detroit  
 Fraser, Mrs. Eldred E.....Detroit  
 Freeman, Mrs. Michael W.....Detroit  
 Gardner, Mrs. L. W.....Detroit  
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 Gottschalk, Mrs. F. W.....Detroit  
 Goux, Mrs. Raymond S.....Detroit  
 Grace, Mrs. Jos. M.....Detroit  
 Greenlee, Mrs. W. T.....Detroit  
 Grossman, Mrs. Sol C.....Detroit  
 Gruber, Mrs. Thomas K.....Eloise  
 Guerrero, Mrs. J.....Detroit  
 Gurdjian, Mrs. E. S.....Highland Park  
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 H'Amada, Mrs. N. K.....Detroit  
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 Harm, Mrs. W. B.....Detroit  
 Harper, Mrs. J. T.....Detroit

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 Hartman, Mrs. Frank W.....Detroit  
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 Hastings, Mrs. Orville J.....Detroit  
 Hauser, Mrs. John E.....Detroit  
 Havers, Mrs. Howard.....Detroit  
 Hawkins, Mrs. Jas. W.....Detroit  
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 Henderson, Mrs. Leslie T.....Grosse Pointe  
 Heyner, Mrs. S. A.....Detroit  
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 Hodges, Mrs. Frank J.....Dearborn  
 Hoffman, Mrs. Edwin S.....Detroit  
 Holmes, Mrs. Alfred W.....Dearborn  
 Honhart, Mrs. Frederick L.....Grosse Pointe  
 Honor, Mrs. Wm. H.....Grosse Ile  
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 Hoops, Mrs. Geo. B.....Detroit  
 Horton, Mrs. R. H.....Detroit  
 Howard, Mrs. Austin Z.....Detroit  
 Howlett, Mrs. Howard T.....Detroit  
 H'Romacko, Mrs. Louis.....Detroit  
 Hull, Mrs. LeRoy W.....Detroit  
 Huminski, Mrs. T. S.....Detroit  
 Hunt, Mrs. Theodore H.....Detroit  
 Husband, Mrs. Chas. W.....Detroit  
 Husband, Mrs. Raymond.....Detroit  
 Igna, Mrs. E. J.....Detroit  
 Insley, Mrs. Stanley W.....Detroit  
 Irwin, Mrs. Wm. A.....Detroit  
 Jaekel, Mrs. C. N.....Grosse Pointe  
 Jaffar, Mrs. Donald J.....Detroit  
 Jenkins, Mrs. Elwood A.....Detroit  
 Jentgen, Mrs. Chas. J.....Detroit  
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 Johnson, Mrs. Vernon P.....Grosse Pointe  
 Johnson, Mrs. Vincent.....Detroit  
 Johnston, Mrs. Wm. E.....Detroit  
 Joinville, Mrs. E. V.....Windsor  
 Jones, Mrs. Roy D.....Detroit  
 Jordan, Mrs. R. G.....Detroit  
 Joyce, Mrs. Stanley J.....Detroit  
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 Kidner, Mrs. F. C.....Grosse Pointe  
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 Kline, Mrs. Starr L.....Detroit  
 Knaggs, Mrs. Chas. W.....Grosse Pointe  
 Knox, Mrs. Ross M.....Allen Park  
 Koebel, Mrs. R. H.....Detroit  
 Kokowicz, Mrs. R. J.....Detroit  
 Kossayda, Mrs. Adam W.....Detroit  
 Krebs, Mrs. Wm. T.....Grosse Pointe  
 Krzynicki, Mrs. F. X.....Detroit  
 Kullman, Mrs. H. J.....Dearborn  
 Kwasiborski, Mrs. Stanley.....Wyandotte  
 LaBerge, Mrs. Jas. M.....Wyandotte  
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 LaMarche, Mrs. Norman O.....Detroit  
 Lamoman, Mrs. H. H.....Highland Park  
 Landers, Mrs. Maurice B.....Dearborn  
 Lange, Mrs. Anthony H.....Detroit  
 Laning, Mrs. Geo. M.....Detroit  
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 Ledwidge, Mrs. P. L.....Beverly Hills  
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 Lightbody, Mrs. J. J.....Detroit  
 Lilly, Mrs. Chas. J.....Detroit  
 Lippold, Mrs. Paul H.....Detroit  
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 Lutz, Mrs. Earl F.....Detroit

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 Mackersie, Mrs. Wm. G.....Detroit  
 MacMullen, Mrs. Frank B.....Holly  
 MacQueen, Mrs. Malcolm D.....Detroit  
 Maczewski, Mrs. John.....Detroit  
 Maibauer, Mrs. Frederick P.....Wyandotte  
 Maloney, Mrs. John A.....Birmingham  
 Mancuso, Mrs. Vincent S.....Detroit  
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 Martner, Mrs. Edgar E.....Grosse Pointe  
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 Mayer, Mrs. Ignatz.....South Bend, Ind.  
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 McClelland, Mrs. Carl C.....Detroit  
 McColl, Mrs. Clark.....Detroit  
 McCormick, Mrs. Colin C.....Dearborn  
 McCormick, Mrs. Frank T.....Detroit  
 McDonald, Mrs. A. L.....Grosse Pointe  
 McDonald, Mrs. Allan.....Detroit  
 McGavah, Mrs. Jos. A.....Detroit  
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 McKean, Mrs. Richard M.....Detroit  
 McKinley, Mrs. Donald C.....Detroit  
 McKinnon, Mrs. John D.....Detroit  
 Mead, Jr., Mrs. John.....Detroit  
 Menagh, Mrs. Frank R.....Detroit  
 Merrill, Mrs. Wm. O.....Bloomfield Hills  
 Millard, Mrs. Glenn.....Detroit  
 Miller, Mrs. Karl L.....Detroit  
 Miller, Mrs. Thomas H.....Detroit  
 Mills, Mrs. C. C.....Detroit  
 Minor, Mrs. Edward G.....Detroit  
 Mitchell, Mrs. W. Bede.....Detroit  
 Moll, Mrs. Clarence D.....Detroit  
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 Molner, Mrs. J. G.....Detroit  
 Monson, Mrs. Robert C.....Detroit  
 Morley, Mrs. J. A.....Detroit  
 Munson, Mrs. Frederick T.....Detroit  
 Murray, Mrs. Wm. A.....Detroit  
 Nagle, Mrs. John W.....Grosse Ile

Normile, Mrs. Thomas W.....Grosse Pointe  
 Norton, Mrs. A. B.....Detroit

Novy, Mrs. Robert L.....Detroit  
 O'Brien, Mrs. G. M.....Detroit  
 Ohmart, Mrs. Galen B.....Detroit  
 Olmstead, Mrs. Wm. R.....Detroit  
 Owen, Mrs. Clarence L.....Detroit  
 Palmer, Mrs. Robert J.....Detroit  
 Panzner, Mrs. Rose.....Detroit  
 Parr, Mrs. Robert W.....Detroit  
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 Pickard, Mrs. O. W.....Detroit  
 Pietraszewski, Mrs. Alex W.....Detroit  
 Pino, Mrs. Ralph H.....Detroit  
 Plaggemeyer, Mrs. H. W.....Detroit  
 Potter, Mrs. L. S.....Detroit  
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 Purcell, Mrs. Frank H.....Grosse Pointe

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 Reiff, Mrs. M. V.....Detroit  
 Rennell, Mrs. Leo P.....Detroit  
 Reveno, Mrs. Wm. S.....Highland Park  
 Reyner, Mrs. Clarence E.....Detroit  
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 Rothbart, Mrs. Harold B.....Detroit  
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 Ryan, Mrs. W. D.....Detroit

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 Sawyer, Mrs. Harold F.....Pleasant Ridge  
 Scarney, Mrs. Herman D.....Detroit  
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 Schneck, Mrs. Robert J.....Detroit  
 Schulte, Mrs. Carl H.....Detroit  
 Seeley, Mrs. J. B.....Dearborn  
 Seibert, Mrs. A. H.....Grosse Pointe  
 Sellers, Mrs. Chas. W.....Detroit  
 Selling, Mrs. Lowell S.....Orlando, Fla.  
 Sewell, Mrs. Geo.....Detroit  
 Sharrer, Mrs. Chas. H.....Grosse Pointe  
 Shawan, Mrs. H. K.....Detroit  
 Sherman, Mrs. Wm. L.....Detroit  
 Sherrin, Mrs. Edgar.....Detroit  
 Siefert, Mrs. Wm. A.....Detroit  
 Singer, Mrs. Floyd W.....Detroit  
 Sippola, Mrs. Geo. W.....Detroit  
 Sladen, Mrs. Frank J.....Grosse Pointe  
 Slangenaupt, Mrs. J. G.....Detroit  
 Slevin, Jr., Mrs. John G.....Detroit

Somers, Mrs. Donald C.....Grosse Pointe  
 Sonda, Mrs. L. Paul.....Detroit  
 Spademan, Mrs. L. C.....Highland Park  
 Spalding, Mrs. Edward.....Grosse Pointe  
 Sprunk, Mrs. Carl J.....Detroit  
 Stapleton, Mrs. Wm. J.....Detroit  
 Stefani, Mrs. E. L.....Detroit  
 Steinbach, Mrs. Henry B.....Grosse Pointe  
 Stelhorn, Mrs. C. E.....Detroit  
 Sterling, Mrs. R. R.....Pleasant Ridge  
 Stockwell, Mrs. Benjamin W.....Detroit  
 Stockwell, Mrs. Glen W.....Detroit  
 Stone, Mrs. Dayton.....Detroit  
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 Szappanos, Mrs. Bela.....Detroit  
 Szejda, Mrs. John C.....Detroit  
 Szmigiel, Mrs. Alex J.....Grosse Pointe

Tenerowicz, Mrs. R. G.....Detroit  
 Toaz, Mrs. Allison B.....Detroit  
 Top, Mrs. Franklin H.....Detroit  
 Townsend, Mrs. Frank M.....Detroit  
 Tryhall, Mrs. S. W.....Detroit  
 Turcotte, Mrs. Vincent J.....Grosse Pointe

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 Warren, Mrs. Wadsworth.....Detroit  
 Watson, Mrs. Harwood G.....Detroit  
 Watson, Mrs. Edwin J.....Bloomfield Hills  
 Watts, Mrs. John C.....Detroit  
 Weaver, Mrs. Clarence E.....Detroit  
 Weber, Mrs. Karl W.....Grosse Pointe  
 Weed, Mrs. Milton R.....Detroit  
 Weiser, Mrs. Frank A.....Grosse Pointe  
 Weltman, Mrs. Carl G.....Mt. Clemens  
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 Whiteley, Mrs. Robert K.....Grosse Pointe  
 Whitney, Mrs. Elmer L.....Detroit  
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 Williams, Mrs. C. J.....Grosse Pointe  
 Wilson, Mrs. Gerald A.....Farmington  
 Wilson, Mrs. Walter J., Jr.....Grosse Pointe  
 Witter, Mrs. Frank C.....Highland Park  
 Witwer, Mrs. E. R.....Grosse Pointe  
 Wood, Mrs. G. P.....Detroit

Yates, Mrs. H. Wellington.....Detroit  
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 Young, Mrs. Lloyd B.....Detroit

Zabinski, Mrs. Edward.....Detroit  
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 Davidson, Mrs. Jack.....Cadillac  
 Daugharty, Mrs. Robert.....Cadillac  
 Gruber, Mrs. John.....Cadillac  
 Inman, Mrs. Kay.....Lake City  
 Landy, Mrs. George.....Cadillac

Lominen, Mrs. Ralph.....Manton  
 McManus, Mrs. A.....Mesick  
 Masselink, Mrs. Lou.....McBain  
 Merritt, Mrs. C. E.....Manton  
 Moore, Mrs. Gregory.....Cadillac  
 Murphy, Mrs. Michael.....Cadillac  
 Posthuma, Mrs. Millard.....Cadillac

Paye, Mrs. Phillip.....Cadillac  
 Smith, Mrs. W. J.....Cadillac  
 Smith, Mrs. Fred.....Lake City  
 Spinks, Mrs. R. E.....Cadillac  
 Stokes, Mrs. William.....Lake City  
 Tornberg, Mrs. Gordon.....Cadillac  
 Youngman, Mrs. Douglas.....Marion

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 Barstow, Mrs. W. E.....St. Louis  
 Bennett, Mrs. George W.....Elsie  
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 Elliot, Mrs. Bruce R.....Ovid  
 Flint, Mrs. C. H.....Hart

Foo, Mrs. C. T.....St. Johns  
 Hickman, Mrs. John K.....Dowagiac  
 Huron, Mrs. W. H.....Iron Mountain  
 Learmont, Mrs. H. H.....Croswell  
 McWilliams, Mrs. W. B.....Maple Rapids  
 Oakes, Mrs. C. W.....Harbor Beach

Pochert, Mrs. R. C.....Owosso  
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To relax spasm, relieve congestion and restore deep, regular breathing,

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has proved a valuable drug—generally effective even in epinephrine-refractory cases.

Searle Aminophyllin is indicated in paroxysmal dyspnea, bronchial asthma, Cheyne-Stokes respiration and selected cardiac cases.

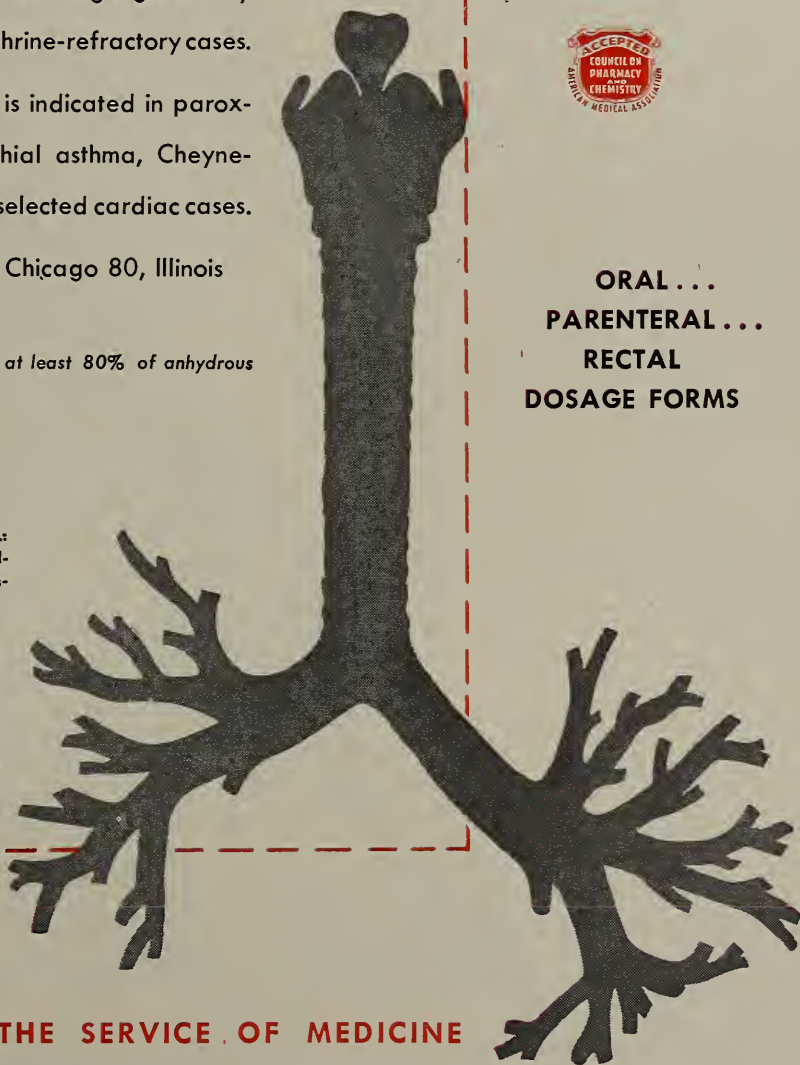
G. D. Searle & Co., Chicago 80, Illinois

\*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

1. Rackemann, F. M., in Cecil, R. L.: Textbook of Medicine, ed. 7, Philadelphia, W. B. Saunders Company, 1948, p. 539.



ORAL . . .  
PARENTERAL . . .  
RECTAL  
DOSAGE FORMS



## SEARLE

RESEARCH IN THE SERVICE OF MEDICINE



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

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## BLOOD PLASMA NEED

Initial shipments of free blood plasma, under the department's new accelerated blood plasma procurement program, have been forwarded to distributors in all participating counties of the state.

Publicity regarding the emergency which exists in many communities in the state since the discontinuance of Red Cross surplus plasma shipments has resulted in an increase in the number of volunteer donors under the program.

To aid in further publicizing the increasing and continuing need for plasma in local communities of the state, the Michigan Department of Health has prepared a series of suggested news stories and editorials, and a series of radio spot announcements which local procurement center public information people can easily fill in and adapt to local use. It has also prepared pamphlets and throwaway pamphlets for local use. It has prepared a transcription of a radio broadcast on the plasma emergency by Dr. A. E. Heustis, state health commissioner, and Dr. G. D. Cummings, director of the Division of Laboratories of the Department, which can be used by local stations. The transcription takes thirteen and one-half minutes and allows time for announcing the local plasma procurement program within a fifteen-minute period.

Staff members of the American Red Cross and of the Department are available to assist in setting up and publicizing the local centers.

## SANITARIANS

Some relief of the shortage of sanitarians for Michigan's local health departments may be found among the twenty-one graduate and undergraduate students in public health engineering in field training under the Michigan Department of Health's field training program this summer.

A greater percentage of this year's trainees are graduate students, ready to accept permanent positions, than in any of the previous thirteen years the fellowships have been offered. Fourteen of the twenty-one have engineering or other college degrees. One of the graduate engineers is a girl, the first in 300 fellowships offered under the program.

The trainees began work in seven southern Michigan counties in June. Their training includes orientation and field observation, followed by actual experience in sanitation projects involving schools, resorts, roadside parks and comfort stations, food handling establishments, slaughter houses, milk plants, milk producing farms, industries and homes. Each trainee also works on all phases of the entire sanitation program in an assigned area.

## MATERNITY NURSES

To determine how best to provide continuity of nursing care for maternity patients through the prenatal, natal and post-natal periods, and how to extend the maternity services of public health nurses to those in the community who need them most, a total of 263 hospital maternity nurses and public health nurses met in three camp institutes during May and June. To aid in the planning, practicing physicians, health officers and Michigan Department of Health people met with the nurses. The institutes were sponsored by the Sections of Maternal and Child Health and Public Health Nursing.

## CHEST X-RAYS

Michigan residents may have free chest x-rays made at any of the twenty-eight fairs and festivals in the state this summer.

Four mobile chest x-ray units of the Michigan Department of Health's state-wide Tuberculosis Casefinding Program will be visiting fairs between mid-July and October.

All persons over fourteen years of age may have x-rays of their chests taken without charge.

More than 1,375 suspect cases of tuberculosis have been found by units visiting fairs in the past three years. Last year, five units visited twenty-nine fairs and found 764 suspect cases of tuberculosis.

The chest x-rays made at the fairs reveal other chest abnormalities as well as tuberculosis. When the x-ray shows an abnormal condition, the individual x-rayed is advised to see his physician. His physician is also notified so that arrangements can be made for larger x-rays and more complete diagnosis. If the x-ray is normal, the individual receives a card telling him that his chest is normal.

Fairs and festivals which the four units will visit this year follow. (All are county fairs except where otherwise indicated.)

Allegan County, September 12-17; Alpena County, September 5-10; Arenac County, August 17-20; Barry County, August 2-6; Bay County, August 22-27; Branch County, September 12-17; Cass County, July 26-30; Cheboygan County, August 16-20; Eaton County, August 30-September 3; Gladwin County, September 19-24; Hillsdale County, September 26-October 1.

Isabella County, August 8-13; Jackson County, August 29-September 3; Lenawee County, September 19-24; Manistee County, September 14-17; Mason County, September 20-24; Mecosta County, August 23-27; Midland County, August 15-20; Monroe County, August 8-13; Oceana County, September 7-10; Ottawa County (Hudsonville), September 1-3; Saginaw County, September 12-17; Shiawassee County, August 8-13; St. Clair (Blue

*(Continued on Page 932)*



# THE HIGH-PROTEIN INFANT FOOD



The incidence of mild protein deficiencies in children, predisposing toward infections and edema, is reported<sup>1,2</sup> much greater than generally realized. Infant and adolescent requirements—not only for tissue repair and maintenance, but also for growth—are much higher than in adulthood.<sup>3</sup> To insure adequate protein intake in infancy, DRYCO—Borden's high-protein infant food—is ideally suited as a basis for formula building. It furnishes *all the essential amino acids*. Its low fat content minimizes gastro-intestinal upsets due to fat intolerance, while its intermediate carbohydrate content lends itself for prescription with or without added carbohydrate. Quickly soluble in cold or warm water, DRYCO contains adequate vitamins A, B<sub>1</sub>, B<sub>2</sub> and D, plus essential milk minerals.

References: 1. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:442, 1936.  
2. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:452, 1936.  
3. Sahyun, M.: *Am. J. Dig. Dis.*, 13:59, 1946.

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DRYCO is made from spray-dried, pasteurized, superior quality whole milk and skim milk. Provides 2500 U.S.P. units vitamin A and 400 U.S.P. units vitamin D per reconstituted quart. Supplies 31½ calories per tablespoon. Available at all drug stores in 1 and 2½ lb. cans.



*The "Custom Formula"*  
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# SABEL'S SURGICAL SHOES

FOR  
INFANTS, CHILDREN,  
MISSES, YOUTHS, GROWING GIRLS,  
BOYS AND MEN



Sabel's Surgical Shoes are laced to the toe, are for use on braces and spastic cases. Steel shanks, broad heels.

Sabel's Surgical Shoes are carried in pattern and leather matching the Club Foot Shoes so that where required, even in split sizes, they can be fitted to the other foot.

*The Sabel Line includes, in addition to the Surgical Shoes the Pre-walker, Brace Pigeontoe and Club Foot Shoes.*

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## CHEST X-RAYS

(Continued from Page 930)

Water Festival), July 18-23; St. Clair (Mardi Gras), August 5-6; St. Joseph County, September 19-24; U. P. State Fair, August 16-20; Wexford County, September 5-9.

## AREAS RAGWEED-FREE

Approximately half of Michigan may offer relief to ragweed hay-fever sufferers, and at least five areas in the state are virtually free from ragweed pollen concentration, according to report of the Michigan Department of Health's 1948 ragweed pollen survey, now being printed.

Five of the fifty-two pollen collecting stations set up by the Department's laboratories reported no day with a ragweed pollen concentration of more than 100 grains per cubic yard of air. Six others reported no more than five days with pollen counts over 100.

Boyne City, Charlevoix and Petoskey in the lower peninsula and Sault Ste. Marie and St. Ignace in the upper peninsula, reported no day with significant pollen count. Frankfort had only one day with pollen count over 100; Manistee, three days; Crystal Falls and Marquette, four days; and Mackinac Island and Mt. Pleasant, five days. Additional areas whose total seasonal count remained under 2,000 grains per cubic yard of air were Cadillac, Cheboygan, Gladwin and Munising.

August 11 was the first date that a station (Sturgis) reported a pollen count of over 100. Most of the stations attained that level between August 18 and 23. Counts at all stations had dropped below 100 by September 20.

Highest total pollen count was reported from the Lansing station which had a seasonal count of 16,583. Other stations with highest seasonal totals were: Sturgis, 15,291; Mt. Clemens, 14,705; Bay City (North Shore), 13,638; Saginaw, 13,573; Grand Rapids, 13,500; Midland, 12,566; Jackson, 12,081; South Haven, 11,618; Bay City, 10,477; and Kalamazoo, 10,259.

The Michigan Department of Health has published detailed reports of the 1948 pollen survey including a map and weekly counts for each of the fifty-two collecting stations which may be had, without charge, by writing to the Michigan Department of Health, Lansing 4, Michigan.

## HEALTH NOTES

Another tour of the Michigan fair circuit by a tent show with a message on venereal disease will be sponsored by the Michigan Department of Health and local health departments during August and September. Last year the Michigan Department of Health pioneered in what was termed "the carnival technique of venereal disease education." This summer at least thirteen other states will have similar VD shows located on or near fair midways.

The VD show is an effort to reach certain segments of the population—those believed to have the highest incidence of venereal disease—with authoritative information on symptoms, cause, spread and cure. The theme of this intensive educational program, repeated in films,

(Continued on Page 934)

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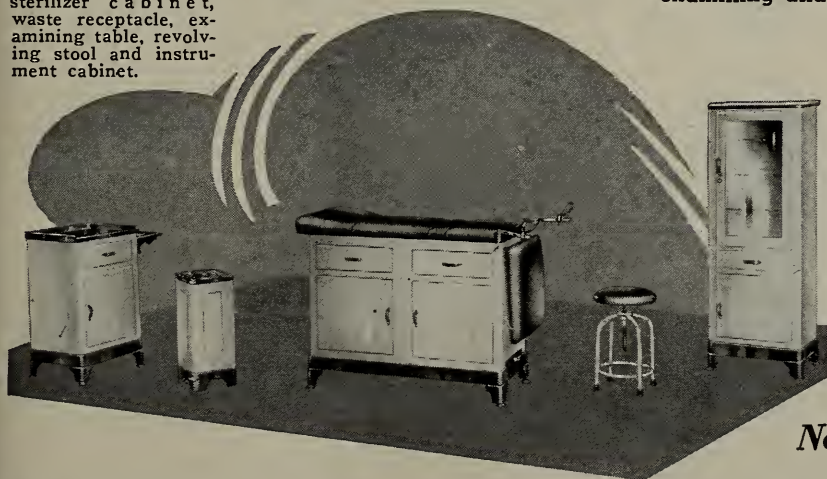
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Sole Importer.



## HEALTH NOTES

(Continued from Page 932)

pamphlets and posters, is: "Don't take a chance! Seek competent advice—see your doctor!" Last year, 23,000 persons saw the VD show at Michigan fairs.

\* \* \*

The Division of Industrial Health is making a survey of all fluoroscopic shoe fitting machines in use in the state, to assure that they are properly constructed to block out x-radiation which might harm clerk or customer.

Special attention is being given to the older machines which are in frequent use. Most of the machines which emit stray radiations are of older or poorly constructed types.

The Department through the press has also advised the general public against considering the fitting machines a "plaything" and against having more than twelve fluoroscopic shoe fittings or "try-ons" during a year.

\* \* \*

Two additional laboratories have qualified for performance of enteric examinations: Pontiac City Health Department, 309 Hubbard Building, Pontiac; and St. Mary's Hospital, 250 Cherry, Grand Rapids.

\* \* \*

More than 850 dentists in the state took part in the continuing education courses offered through the state this spring by the Michigan State Dental Society and the Michigan Department of Health. Essayists and clinicians of national repute presented information on detection of oral cancer.

This department is urging local health departments to co-operate with local medical societies and local chapters of the Michigan Diabetes Association in planning for Diabetes Detection Week, October 10 to 16.

The department has for loan a film, "The Story of Wendy Hill," prepared by the American Diabetes Association which deals with problems of the diabetic and stresses the importance of early diagnosis and treatment.

It will also prepare in co-operation with other interested agencies, an educational pamphlet on diabetes for general distribution. It is also planned to prepare a poster urging early examination for diabetes when symptoms appear or if there is a case of diabetes in the family.

\* \* \*

A lead article discussing the incidence of venereal disease among Michigan high school boys and girls, written by Dr. John A. Cowan, director of the Division of Tuberculosis and Venereal Disease Control, appeared in the April issue of the *Michigan Education Association Journal*. The article, entitled "VD Invades the Classroom," called for renewed emphasis on moral prevention.

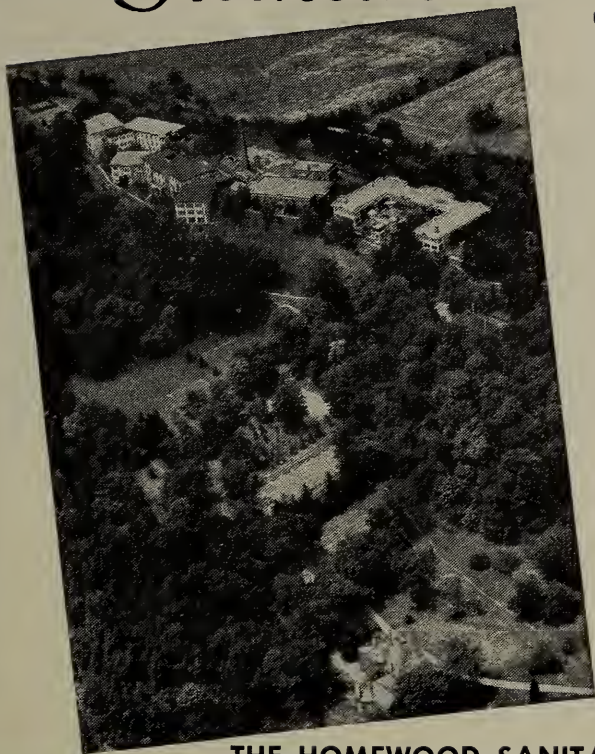
\* \* \*

The American Water Works Association has awarded to John Hepler, director of the Division of Engineering, the George Warren Fuller Award for outstanding contribution to the field of water treatment and leadership in the water supply field in Michigan.

Visitors from Brazil, Italy, Finland, Chile, India and

(Continued on Page 936)

# Homewood Sanitarium



Homewood is a fully equipped 200 bed Private Sanitarium with its over 90 acres of beautiful countryside situated at Guelph, Ontario, only sixty miles from Toronto. Nervous and mild mental disorders and also a limited number of suitable cases of long standing mental illness, habit cases and cases of senility are admitted. Under the direction of a staff of Psychiatric Specialists and Physicians, all modern methods of treatment are available, including Psychotherapy, Insulin, Electroshock and Electronarcosis combined with fully up-to-date Physiotherapy, Occupational and Recreational therapy. Rates are from \$56.00 to \$75.00 per week which includes comfortable accommodation, meals, ordinary medicine and nursing care, ordinary laboratory procedures, physiotherapy, psychotherapy and occupational and recreational therapy. Write for illustrated folder.

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(Continued from Page 934)

England were in the Michigan Department of Health during the month of May.

They included Dr. Amaury de Medeiros of the Division of Sanitary Organization, Rio de Janeiro, Brazil, on a USPHS fellowship; Dr. Renzo Davoli of the Institute of Hygiene, Florence University, Florence Italy, on a World Health Organization fellowship; Dr. Mario Miranda of the Bacteriology Institute, Santiago, Chile, on a Rockefeller Foundation fellowship; Dr. Vaino O. Kannisto, of Finland on a World Health Organization fellowship whose visit was arranged by the Milbank Memorial Fund; G. L. Sharma, D.V.M., of India, post-graduate student of Michigan State College; and Dr. A. W. Stableforth, Deputy Director of Veterinary Laboratory, Weybridge, England.

### INCIDENCE OF CERTAIN REPORTABLE DISEASES

Disease	May 1949	May 1948
Diphtheria .....	16	3
Gonorrhea .....	805	678
Lobar pneumonia.....	95	97
Measles .....	3301	7636
Meningococcic meningitis.....	6	11
Pertussis .....	155	157
Poliomyelitis .....	3	0
Rheumatic fever .....	100	62
Syphilis .....	772	1025
Tuberculosis .....	471	304
Typhoid fever.....	4	2
Undulant fever.....	18	17
Smallpox .....	0	0

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## NEWS MEDICAL

*The 1950 American Academy of General Practice Assembly* will be held in Kiel Auditorium, St. Louis, Missouri, February 20-21-22-23 (from Monday noon to Thursday noon).

\* \* \*

"Under socialized medicine the government may give you free medicine, and worse still may make you take it."  
—Lansing, Michigan, *Rotogram*, May 25, 1949.

\* \* \*

Whereas 208 students were admitted to the two medical schools of Michigan in 1948 (140 to the University of Michigan and 68 to Wayne University), the total number of doctors licensed in Michigan in 1948 was 482.

\* \* \*

*Pulmonary tuberculosis* is the most serious public-health problem in the Philippines. It exists throughout the islands in epidemic form, and it is estimated that 10 per cent, or more, of the population suffer from it. The leading cause of death, it is responsible for from 15 to 20 per cent of all deaths, and it is one of the leading contributors to the high infant mortality rate. The war not only increased all the predisposing factors, but destroyed most of the islands' means of coping with the disease.—  
LEROY K. YOUNG, M.D., *Pub. Health Rep.*, Feb. 4, 1949.

\* \* \*

F. A. Collier, M.D., and R. W. Buxton, M.D., Ann Arbor, are authors of an original article, "Acute Obstruction of the Small Bowel," which appeared in *JAMA* of May 14.

\* \* \*

The Kent County Medical Society sponsored the first Western Michigan Clinic Day in Grand Rapids on May 25. At this all-day scientific meeting, a great array of talent was presented, including Elliot P. Joslin, M.D., Boston; James D. Masson, M.D., Rochester, Minn.; Walter C. Alvarez, M.D., Rochester, Minn.; Allan C. Barnes, M.D., Columbus, Ohio; Fred E. Adair, M.D., New York; Carl W. Walter, M.D., Boston, and George M. Curtis, M.D., Columbus.

\* \* \*

The Michigan Society of Anesthesiologists will hold its annual dinner meeting at the University Club in Grand Rapids, September 21, at 6:30 p.m. John Lundy, M.D., of Rochester, Minnesota, will be the guest of honor. The annual election of officers will take place at this meeting. Reservations should be made with Mary Lou Byrd, M.D., Secretary, Butterworth Hospital, Grand Rapids, Michigan.

\* \* \*

The Upjohn Company of Kalamazoo opened a Philadelphia branch on July 1 to serve parts of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, and the District of Columbia.

The MSMS House of Delegates will meet on Monday and Tuesday, September 19-20, 1949.

*At the AMA in June, 1949:*

Ernest E. Irons, M.D., Chicago, assumed the presidency.

Elmer L. Henderson, M.D., Louisville, Ky., was chosen president elect.

George F. Lull, M.D., Chicago, re-elected secretary and general manager.

F. F. Borzell, M.D., Philadelphia, re-elected speaker, House of Delegates.

James R. Reuling, M.D., Bay Side, N. Y., re-elected vice speaker, House of Delegates.

Louis H. Bauer, M.D., Hempstead, N. Y., re-elected trustee and chosen chairman of the Board.

F. J. L. Blasingame, M.D., Wharton, Texas, elected to Board of Trustees.

Elmer Hess, M.D., Erie, Pennsylvania and Thomas A. McGoldrick, M.D., Brooklyn, elected to Council on Medical Service.

San Francisco will be host to the AMA in June, 1950; Atlantic City in June, 1951; and Chicago in June, 1952.

The Interim Session of 1949 will be held in Washington, D. C., and in Denver in 1950.

\* \* \*

The Detroit Medical News Editor, William Bromme, M.D., submits an unusual editorial in the June 20 number of the *News* entitled "Summertime—and the Living is Easy". He mentions that the socializers of medicine et al are busy, during the summertime as well as in the wintertime, and ends his interesting essay with this admonition to doctors: "And to that end, forget summertime and its easy living, for this is a fight for freedom."

\* \* \*

Lawrence Reynolds, M.D., Detroit, received the Honorary degree of LL.D. from his Alma Mater, the University of Alabama, at its June, 1949, commencement. Congratulations, Dr. Reynolds!

\* \* \*

Robert Schaefer, Sr., M.D., received an honorary doctorate of science from the University of Detroit at the graduation exercises of June 15. Congratulations Dr. Schaefer!

\* \* \*

The Michigan Rehabilitation Association will hold its Annual Meeting at the Hayes Hotel, Jackson, Michigan, on Monday, October 3, beginning with a luncheon at 12:00 noon.

B. H. Van Leuven, M.D., Traverse City, Chairman of  
(Continued on Page 940)



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(Continued from Page 938)

the Medical Section of the Michigan Rehabilitation Association, is developing the medical section program. The theme of the entire meeting will be "Community Services for the Disabled" and the general subject of the Medical Section will be "Integrated Community Services for the Cardiac Patient". The final program will be published in the August number, JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

All members of the Michigan State Medical Society are cordially invited to attend the Jackson sessions of the Michigan Rehabilitation Association. No registration fee for doctors of medicine.

\* \* \*

*Diabetes Detection Week* will be held October 10-16, 1949. During this period a concentrated drive will focus special attention on the continuous year-around program of selling the story of diabetes to the public and urging people to consult their doctors of medicine whenever any suspicious symptoms appear or when diabetes develop in relatives.

The Diabetes Detection Drive is to be managed locally by the diabetes committee of the county medical society.

The Michigan Diabetes Association (co-chairmen Wm. M. LeFevre, M.D., 601 Hackley Union Bank Bldg., Muskegon, and George C. Thosteson, M.D., 1139 David Whitney Bldg., Detroit), is actively interested in the October 10-16 drive and is in position to offer sample copies of news releases, radio talks, and other helps which any county committee may desire, including plans utilized during the successful diabetes drive of December, 1948.

\* \* \*

*The MSMS Annual Session* will be held at the Pantlind Hotel, Civic Auditorium, Grand Rapids, September 21-22-23, 1949. Abstract of the program is published in this number of THE JOURNAL—and its a wonder! An attendance of 2,300 is anticipated, so write without delay to Joseph R. Lentini, M.D., chairman, Committee on Hotels, MSMS, c/o Pantlind Hotel, Grand Rapids, indicating the type of accommodations you desire and the dates of your arrival and departure in Grand Rapids next September.

\* \* \*

*The American Urological Association* (North Central Section) is sponsoring a postgraduate course in urology at the Hotel Sherman, Chicago, December 5-9, 1949. The course is open to members and to any doctors of medicine interested in a short postgraduate course in urology. The tuition fee is \$50. For application and information write Wm. J. Baker, M.D., 7 W. Madison, Chicago 2, Ill.

\* \* \*

*Michigan Nursing Center Association* officers elected in May are Elizabeth S. Moran, Detroit, president; Rhoda F. Reddig, Ann Arbor, vice president; Lucy D. Germain, Detroit, secretary; Margaret Shetland, M.D., Lansing, treasurer.

(Continued on Page 942)



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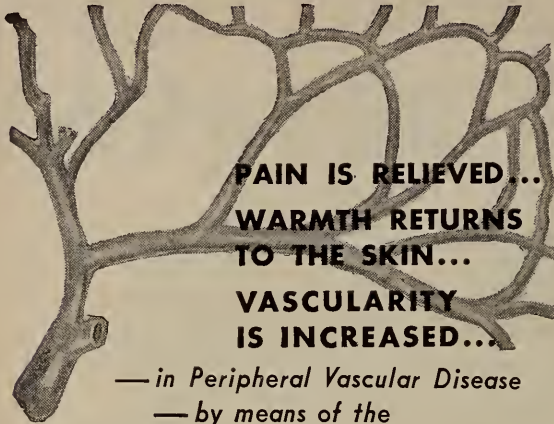
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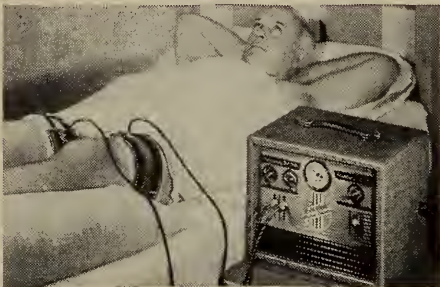




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(Continued from Page 940)

C. D. Selby, M.D., Detroit, recently announced his retirement as medical consultant to General Motors Corp., effective July 1. He will be succeeded by Max R. Burnell, M.D., Flint.

Congratulations, Dr. Selby, on a job well done! All success to Dr. Burnell in this important assignment.

\* \* \*

The Hack Shoe Company, Detroit has opened a branch store, devoted to children's orthopedic-type footwear, at 19170 Livernois in the Williamsburg Row, Detroit.

\* \* \*

L. Fernald Foster, M.D., Bay City, MSMS Secretary, appeared at a community meeting in Reed City on May 12 and spoke on "The National Health Program." On May 19 he addressed the American Association of University Women at Bay City on "Compulsory Health Insurance." His topic on May 22 at the annual meeting of the Michigan Association of Collection Agencies was "Compulsory Health Insurance—A Compulsory Tax." In Bay City on May 25 his talk to the staff nurses at the Bay City General Hospital graduation exercises was labeled "The Implications of the National Health Bill."

\* \* \*

Maternal mortality in Michigan in 1933 was 6.1 per thousand live births; in 1947 it dropped to 1.1 per thousand live births.

And this, under a voluntary system of medical practice!

\* \* \*

W. F. Strong, M.D., Ontonagon, long-time secretary of the Ontonagon County Medical Society, has been appointed to serve as chairman of the County Secretaries Conference of January, 1950. Congratulations, Dr. Strong!

\* \* \*

Geraldine Chapman Wins "Ideal" Title.—Miss Geraldine Chapman was chosen "ideal business girl" Sunday at the annual international convention of Alpha Iota business girls' sorority in Colorado Springs, Colo.

A member of the Lansing alumnae group of Alpha Iota, Miss Chapman is a secretary in the offices of the Michigan State Medical Society, Olds Tower.—*Lansing State Journal*, June 20, 1949.

\* \* \*

Major Gen. Grow to Head Air Force Medical Service.—General Hoyt S. Vandenberg, Air Force Chief of Staff, recently announced the organization of the U. S. Air Force Medical Service within the department of the Air Force. It will be headed by Major Gen. Malcolm C. Grow, the Air Surgeon.

Highlight of the plan for the service is the provision assuring career opportunities for personnel. Housing for medical officers and their families, stability of assignment, and opportunities for medical and scientific advancement are features of the plan.

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(Continued on Page 944)



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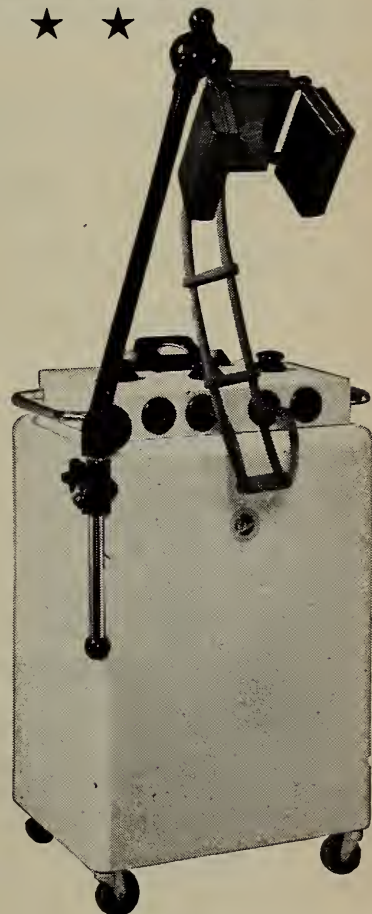
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(Continued from Page 942)

in aviation medicine. Professional facilities of general hospitals and laboratories, approved civilian institutions and air force facilities will be used to provide regularly spaced training tours for members of the air force medical service," the announcement stated.

The plan is designed to correct major objections of professional people to a career in the armed forces. Medical officers will be given every opportunity to pursue their specialties, and doctors and dentists who volunteer to serve for more than one year will continue to receive the extra \$100 a month. Officers, nurses, and enlisted technicians who qualify and are assigned flying duties will receive additional hazard pay.

\* \* \*

*Results of Diabetes Detection Drive.*—Dr. Howard F. Root, of Boston, of the American Diabetes Association, reports that the diabetes detection drive, which was inaugurated by the association during Diabetes Week, December 6-12, covered 145,960 patients, including 37,243 children. The program is continuing and the results are not yet complete.

No money was sought from the public during the drive. Local committees of doctors from county medical societies provided for free testing of urine of patients either in the doctors' offices or in detection centers.

This attempt by American physicians to attack a public health problem without asking for money is certainly a good will gesture.

Diabetes week this year will be observed from October 10-16.

\* \* \*

*Michigan Authors.*—Rudolf J. Noer, M.D., and John William Derr, M.D., Detroit, published a paper in *Archives of Surgery*, for May, 1949, entitled "Revascularization Following Experimental Mesenteric Vascular Occlusion."

Henry K. Ransom, M.D., of Ann Arbor, published a paper in *Archives of Surgery*, for May, 1949, entitled "Treatment of Jejunal Ulcer: A Comparative Follow-Up Study."

M. H. Seevers, M.D., Ph.D., Ann Arbor, took part in a symposium: Anesthesia in Otolaryngologic Surgery, "The Preparation of the Patient," published in *Transactions of the American Academy of Ophthalmology and Otolaryngology*, March-April, 1949.

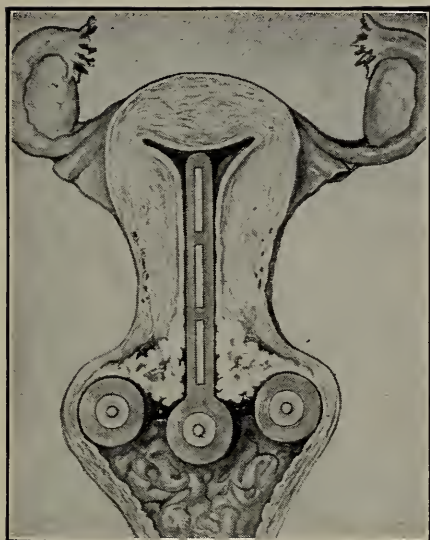
Arthur C. Curtis, M.D., and Robert H. Grekin, M.D., Ann Arbor, published a paper on "Sarcoidosis: Treatment with Calciferol and Dihydratichysterol" in *Transactions of the American Academy of Ophthalmology and Otolaryngology*, March-April, 1949.

The *Journal of the South Carolina Medical Association* for May, reprinted in full our editorial, "Politics and Medicine," from the February, 1949, *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*.

The *General Practitioner of Australia and New Zealand*, a monthly medical journal published in the "down under land," in their April number copied a paper by Howard H. Cummings, M.D., of Ann Arbor, entitled

(Continued on Page 946)

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### Cook County Graduate School of Medicine

#### ANNOUNCES CONTINUOUS COURSES

**SURGERY**—Intensive course in Surgical Technique, two weeks, starting July 25, August 22, September 26.  
Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting July 11, August 8, September 12.  
Surgical Anatomy and Clinical Surgery, two weeks, starting July 25, August 22, September 26.  
Surgery of Colon and Rectum, one week, starting September 12, October 10.  
Esophageal Surgery, one week, starting October 10.  
Thoracic Surgery, one week, starting October 3.  
Breast and Thyroid Surgery, one week, starting October 10.  
Fractures and Traumatic Surgery, two weeks, starting October 3.  
**GYNECOLOGY**—Intensive course, two weeks, starting September 26, October 24.  
Vaginal Approach to Pelvic Surgery, one week, starting September 19, November 7.  
**OBSTETRICS**—Intensive course, two weeks, starting September 12, November 7.  
**MEDICINE**—Intensive general course, two weeks, starting October 3.  
Gastroenterology, two weeks, starting October 24.  
Gastroscopy, two weeks, starting July 18, September 26.  
Electrocardiography and Heart Disease, two weeks, starting July 18.  
Electrocardiography and Heart Disease, four weeks, starting September 7.  
**PEDIATRICS**—Personal course in Cerebral Palsy, two weeks, starting August 1.  
**DERMATOLOGY**—Formal course, two weeks, starting October 24.  
Informal clinical course every two weeks.  
**UROLOGY**—Intensive course, two weeks, starting September 26.  
Ten-day practical course in Cystoscopy every two weeks.  
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(Continued from Page 944)

"The Climacteric and Its Management," which was published in the December, 1948, JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Michigan Medical Service will hold its membership luncheon in the Furniture Club of the Pantlind Hotel on Tuesday, September 20, at 1:00 p.m. Following the luncheon, the annual membership meeting will be held at 2:00 p.m. in the Ballroom, Pantlind Hotel. All members of the MSMS House of Delegates are members of Michigan Medical Service.

"Health is a privilege, not a right. And as a privilege it demands the acceptance of individual responsibility for conservation."—Ingham County Medical Society Bulletin, June, 1949.

\* \* \*

L. G. Christian, M.D., Lansing, a member of the State Social Welfare Commission since it was created in 1939, was elected chairman of the Commission at its meeting of June 23, 1949. Congratulations, Dr. Christian!

\* \* \*

**Volunteers for Duty with the Armed Forces.**—Physicians who received all or part of their medical education under government auspices through the wartime ASTP and V-12 programs, and those M.D.s who were deferred from military service to complete their educations at their own expense, have been invited and urged by the Secretary of Defense and by the American Medical Association and Michigan State Medical Society to volunteer at once for duty with the Armed Forces which vitally needs doctors now.

A quota of sixty-eight volunteers has been established for Michigan. Seven have volunteered. Required is a total of sixty-one. Let's help the U. S. Secretary of Defense keep this vital campaign a voluntary—not a compulsory—program. Doctors must volunteer or be drafted.

\* \* \*

**Conference of Presidents and Other Officers of State Medical Associations.**—Dr. Clarence E. Northcutt, past president of the Oklahoma State Medical Association, and one-time mayor of Ponca City in that state, was elected president of the Conference of Presidents and Other Officers of State Medical Associations at the fifth annual session of that group. Dr. Julian Price, of Florence, South Carolina, secretary of the medical society in that state, was named as president-elect, and John E. Farrell, of Providence, Rhode Island, executive secretary of the Rhode Island Medical Society, was re-elected secretary-treasurer.

Elected as new members of the Executive Committee were the retiring president, Dr. Joseph H. Howard of Bridgeport, Connecticut, Dr. Andrew Brunk of Detroit, Michigan, and Dr. Ross T. Wright of Tacoma, Washington.

(Continued on Page 948)



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(Continued from Page 946)

**Cancer Detection.**—The Executive Committee of The Council, on April 13, 1949, took action reiterating "its approval of the Hillsdale-type plan of cancer detection; and that the question of reporting, and the question of making the county health unit the repository of such statistical data be a matter of decision with the local county medical society."

\* \* \*

"Cancer: The Problem of Early Diagnosis" is a new film sponsored by the American Cancer Society and approved by the American Medical Association Committee on Medical Motion Pictures. Designed for general practitioners, the film is based on the premise that if cancer were diagnosed early and treated effectively, the death rate might be reduced by almost 50 per cent. Prints for single showings may be borrowed from the American Cancer Society, 47 Beaver Street, New York 4, New York.

## Woman's Auxiliary

### CONVENTION PROGRAM

Tuesday, September 20: Welcoming Dinner, Continental Room, Pantlind Hotel, 6:30 p.m. Entertainment.

Wednesday, September 21: Pre-Convention Board Meeting, Luncheon, Schubert Room, Pantlind Hotel, 1:00 p.m.

Wednesday, September 21: Banquet, Furniture Club Room, Pantlind Hotel, 6:30. Speaker.

Wednesday, September 21: Furniture Club Room, Pantlind Hotel, 10:30 p.m. Open House, honoring the following:

Dr. and Mrs. A. LaBine, Houghton  
Dr. and Mrs. C. W. Oaks, Harbor Beach  
Dr. and Mrs. Homer H. Stryker, Kalamazoo, Mich.  
Dr. and Mrs. T. Grover Amos, Detroit  
Dr. and Mrs. C. Allen Payne, Grand Rapids  
Mrs. Willis L. Dixon, Grand Rapids  
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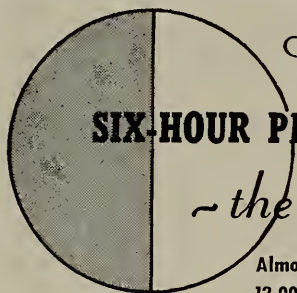
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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**CARE OF THE SURGICAL PATIENT**—Including Pathologic Physiology and Principles of Diagnosis and Treatment. By Jacob Fine, M.D., Surgeon-in-Chief, Beth Israel Hospital; Professor of Surgery at Beth Israel Hospital, Harvard Medical School. 544 pages with 40 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$8.00.

An entirely new field of medical books, so far as we know, is invaded with this volume. It is not a text on surgery, but it covers diagnosis and medicine in many branches as these problems are presented by the surgical patient. The attendant surgeon is many times faced with complications or intercurrent things which tax him to the limit. Over twenty eminent doctors have collaborated and helped in the preparation of this book. The various fields are carefully analyzed for whatever help they can give to make the care of the surgical patient

more complete and satisfactory. This is a typical Saunders book, beautifully executed.

**AESCULAPIUS COMES TO THE COLONIES.** The Story of Early Medicine in the Thirteen Original Colonies. By Maurice Bear Gordon, M.D., Ventnor, N. J.: Ventner Publishers, Inc., 1949. Price \$10.00.

This book is divided into thirteen chapters, one for each of the original states and is a compilation of notes, pictures from old books and manuscripts. It is a vast storehouse of interesting facts about the doctors of the colonial and revolutionary times. Historical facts and information are mixed into medical and personal history to make a disjointed but very interesting book. It has exhausted all the sources of medical history, and made a thoroughly entertaining and instructive work. Source of material is gleaned from every conceivable place.

**THE AMERICAN NURSES DICTIONARY**—The Definition and Pronunciation of Terms in the Nursing Vocabulary. By Alice L. Price, B.S., R.N., Instructor in Nursing Arts at Columbia Hospital, Milwaukee. 656 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$3.75.

A very handy thumb-indexed volume is offered and dedicated to students of nursing. Approximately 25,000 words are defined in the book. It is nursing, not medical, and is so written that it will be useful to students who do not necessarily have a university training. It is well printed, in clear and sufficiently large type.

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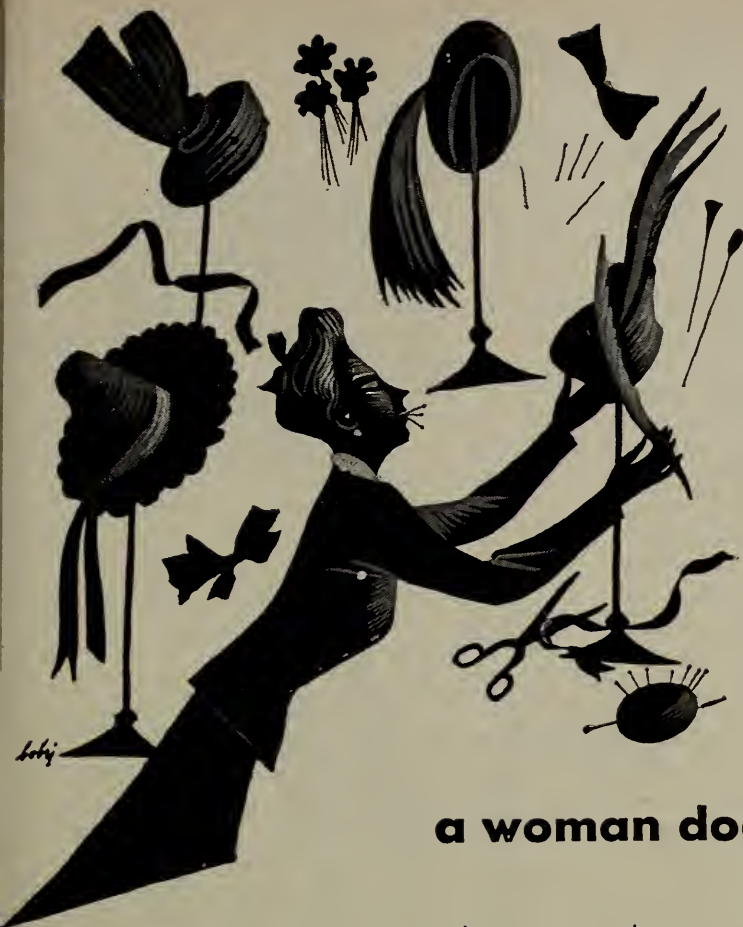
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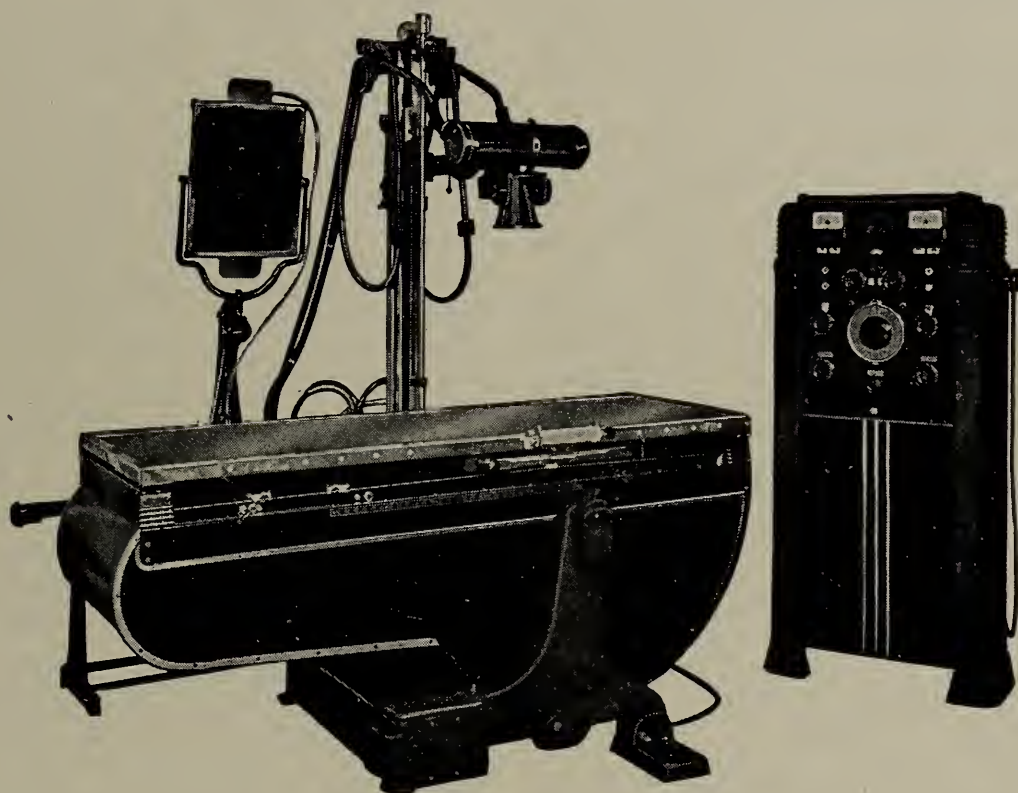
# County Medical Societies

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## HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of June 15, 1949

- Monthly financial reports, including detailed breakdown of Public Education Account and of the Public Education Reserve Account, were presented, studied, discussed and approved. Bills payable for the current month were presented and approved. The need for replenishing the Rheumatic Fever Control Account was discussed and referred to the MSMS Rheumatic Fever Control Committee to contact the Michigan Heart Association and the Michigan Society for Crippled Children and Adults, Inc.
- More space for Executive Offices. The Special Committee (E. F. Sladek, M.D., Chairman) reported on its inspection of several properties in Lansing, in its efforts to secure a suitable and dignified headquarters for MSMS.
- Committee reports were accepted from the Rheumatic Fever Control Committee, Advisory Committee to the National Foundation for Infantile Paralysis, Postgraduate Medical Education Committee, Cancer Control Committee, Medical Advisory Committee to Michigan Medical Assistants Society; progress reports also were presented on the Third Michigan Rural Health Conference, on meeting of the Michigan Health Council's Trustees, and on the Michigan Council on Adult Education meeting of June 1. Minutes of the Committee on Blood Banks, meeting of May 12, were received and referred to the Committee for reconsideration.
- In his President's monthly report, E. F. Sladek, M.D., stated he had accepted an invitation to be a member of the Committee on the Organization of the Federal Government which is urging upon the federal Congress the utilization of the Hoover Commission report.
- The President-Elect, W. E. Barstow, M.D., reported on activities at the AMA House of Delegates in Atlantic City, June, 1949.
- Assembly Chairmen and Secretaries for the 1949 MSMS Annual Session in Grand Rapids were appointed.
- Printing of the revised Uniform Fee Schedule for Governmental Agencies was approved.
- Michigan's Health Commissioner A. E. Heustis, M.D., reported that the distribution of federal funds to local health departments is now being organized on an adjusted formula, which is more fair to all local health departments; that the reorganization of the State Health Department, from sixteen main divisions to seven, is now complete.
- The Public Relations Counsel reported that copies of the brochure "The Country Doctor Answers the Ewing Report" have been mailed to the Presidents of all Rotary Clubs in the United States, with uniformly favorable reaction; also that the Woman's Auxiliary has completed a fine job in placing the brochure "Medical Associates" in schools throughout the State, including Detroit; that the Michigan State Medical Society received signal recognition at the AMA Atlantic City meeting in the publishing of lists of organizations which have adopted resolutions opposing socialized medicine—Michigan has twice as many organizations listed in this category as any other state.

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### AMA HOUSE OF DELEGATES APPROVES SEPARATION OF AMA AND AMCP

Complete separation of the American Medical Association and Associated Medical Care Plans was approved by the AMA House of Delegates at its 98th Annual Session in Atlantic City, meeting from June 6 to June 9, 1949.

Recommended originally by the Council on Medical Service of the AMA, in statement delivered to the Blue Shield Commission of AMCP at its meeting in Hollywood, Florida, on April 15, 1949, the separation was accepted by the Blue Shield national organization before the question was placed before the AMA House of Delegates.

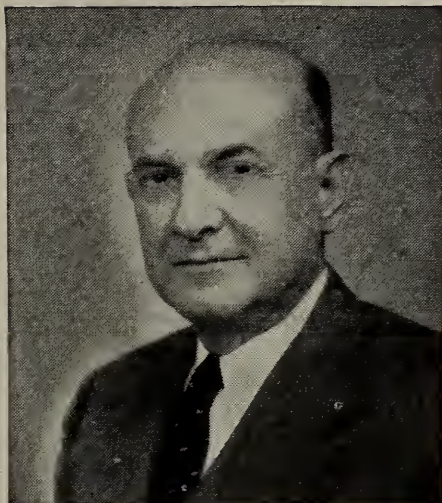
E. Vincent Askey, M.D. (California), chairman of the reference committee to which the Council's recommendation was referred, in commenting on the committee's report, said:

"Your reference committee feels that it is important that the Delegates read carefully the comment of the Council on Medical Service, appearing in the second paragraph of its recommendation, so there may be no

*(Continued on Page 962)*

FROM SECRETARY OF DEFENSE LOUIS JOHNSON—

# AN URGENT APPEAL TO YOUNG DOCTORS!



*Your personal help is needed to avert a serious threat to our national security!*

By the end of July of this year we will have lost almost one-third of the physicians and dentists now serving with our Armed Forces. Without an increased inflow of such personnel, the shortage will assume even more dangerous proportions by December of this year.

These losses are due to normal expiration of terms of service. The professional men who are leaving the Armed Forces during this critical period are doing so because they have fulfilled their duty-obligations and have earned the right to return to civilian practice.

Without sufficient replacements for these losses, we cannot continue to provide adequate medical and dental care for the almost 1,700,000 service men and women who are the backbone of our nation's defense.

## ***Normal procurement channels will not provide sufficient replacements!***

To alleviate this critical, impending shortage of professional manpower in the three services, I am urging all physicians and dentists who were trained under wartime A. S. T. P. and V-12 programs under government auspices or who were deferred in order to complete their training at personal expense, and who saw no active service, to volunteer for a two-year tour of active duty, at once!

We have written personally to more than 10,000 of you in the past weeks urging such action. The response to this appeal has not been encouraging, and our Armed Forces move rapidly toward a professional manpower crisis!

Many responses have been negative, but worse—a great number of doctors have not replied. It is urgent that we hear from you immediately!

*We feel certain that you recognize an obligation to your fellow men as well as to your profession in this matter. We are confident that you will fulfill that obligation in the spirit of public service that is a tradition with the physician and dentist.*

There is much to be said for a tour of duty with any of the Armed Forces. You will work and train with leading men of your professions. You will have access to abundant clinical material; have the best medical and dental facilities in which to practice. You will expand your whole concept of life through travel and practice in foreign lands. In many ways, a tour of service will be invaluable to you in later professional life!

*Volunteer now for active duty. You are urged to contact the Office of Secretary of Defense by collect wire immediately, signifying your acceptance and date of availability. Your services are badly needed. Will you offer them?*

*Louis Johnson*



## AMA HOUSE OF DELEGATES APPROVES SEPARATION OF AMA AND AMCP

(Continued from Page 960)

misunderstanding as to the value attached to the accomplishments of AMCP."

The statement referred to in Dr. Askey's word of caution said:

"The Council on Medical Service desires at this time to acknowledge the efforts of AMCP in promoting through its member plans the principle of voluntary prepayment health insurance; and believes that AMCP has reached a state of development where it can function more adequately as an autonomous trade association."

In approving another resolution, introduced by L. Howard Schriver, M. D. (Ohio), the House of Delegates pledged its support to AMCP as an independent federated agency representing state and local Blue Shield Plans.

It was commonly agreed, by all concerned, that one of the reasons for the separation of these two organizations had been an inability to agree upon a Blue Shield proposal to establish a national enrollment agency for handling so-called national accounts. The dilemma was solved by adoption of the Schriver resolution:

"Be It Further Resolved that the several state and local Blue Shield Plans continue the development of an enrollment agency to act in their interest in the field of so-called 'national accounts,' using their best judgment (and that of sponsoring societies) with respect to the methods, means, procedure and form of organization by which the problems related to national accounts may be solved."

Five members of the Blue Shield Commission originally appointed by the Council on Medical Service, were invited by the Commission to continue their membership as individuals, even though they no longer represented the AMA. The five Commissioners include Drs. A. W. Adson, Elmer Hess, Charles Gordon Heyd, J. D. McCarthy, and Carl F. Vohs.

Leaders in the Blue Shield movement accepted the change in status as an indication that AMCP had matured to the point where it could function, and move efficiently as an independent trade organization, without official relationship to the AMA. A situation which had become highly controversial was resolved to the apparent satisfaction of everyone involved.

## LABOR OFFICIALS ASK HIGHER INCOME LIMITS FOR SERVICE BENEFITS

Speaking to an assemblage of over four hundred physicians, hospital administrators, business leaders, and friends of Blue Shield and Blue Cross in Kansas City recently, Harry Becker, Director of Society Security for the UAW-CIO pleaded with

the physicians of America to support their Blue Shield Plans and find a way to raise income ceilings on service benefits. Said Mr. Becker:

"We urgently and pleadingly ask the physicians throughout America to support their Blue Shield program and to find a way to adjust their program so that persons with incomes below \$5,000 will be assured that when illness strikes and hospital care is necessary, the voluntary Blue Shield Plan will meet the whole cost of the doctor's care while the patient is in the hospital.

"The average worker does not want cash indemnity, and cash indemnity is a poor substitute for National Health Insurance," Becker continued. "Blue Shield is the only agency that can deliver a full service contract. Commercial insurance cannot do this job. Both Blue Cross and Blue Shield are in a unique position in that they are tax-free, they are non-profit, and they can make contracts with hospitals and physicians for delivery of service which no insurance company can do.

"What we want in UAW-CIO, and what other unions want, is assurance that when our workers go to the hospital, the hospital and doctor bills will be paid. Until we have done that job we have not answered the problem of how we are going to pay for medical care, and we have not provided an alternative to National Health Insurance."

Mr. Becker, in addition to his official responsibility with the largest labor union in America, is a member of the governing boards of both Blue Shield and Blue Cross in Michigan. His appearance in Kansas City was scheduled as the highlight of the annual meetings of Blue Shield and Blue Cross, held jointly at the President Hotel on May 13, 1949.

Telling his listeners that labor recognized the costs involved in providing adequate medical care, Becker indicated that fourth round economic demands for 1949 would be directed toward employer-financed health and welfare programs. He expressed, further, the hope that Blue Shield Plans would be in a position to deliver a satisfactory program of prepaid medical care when the chips were down.

Referring to national coverage, Becker stated:

"I hope Blue Shield and Blue Cross will arrange for uniform, national standards of benefits, so that when an agreement is made with an employer for financing hospital and medical costs, the program can be delivered wherever the employee lives, whether the contract was made in Detroit, Pittsburgh, Cleveland, Los Angeles or Kansas City and whether the employees live in one part of the country or another part of the country. We can't do for our members in Michigan what we cannot do for our members in Missouri under the same labor management contract."

Becker mentioned, in passing, the importance of public representation on Blue Shield and Blue Cross Boards of Trustees, basing his whole argument on the great need for all groups, medical, hospital, and labor, to work together toward finding an answer to the people's problem of meeting the costs of health care.

(Continued on Page 964)



# in hay fever...

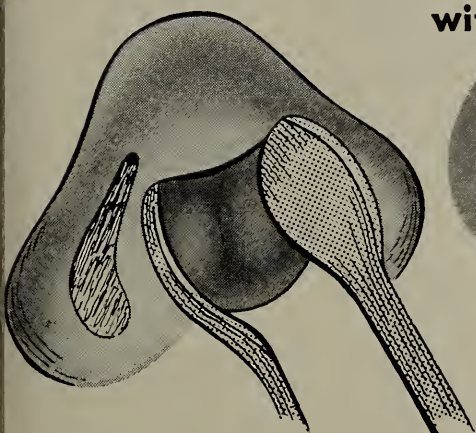
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- ...Soreness, Congestion Relieved
- ...Aeration Promoted
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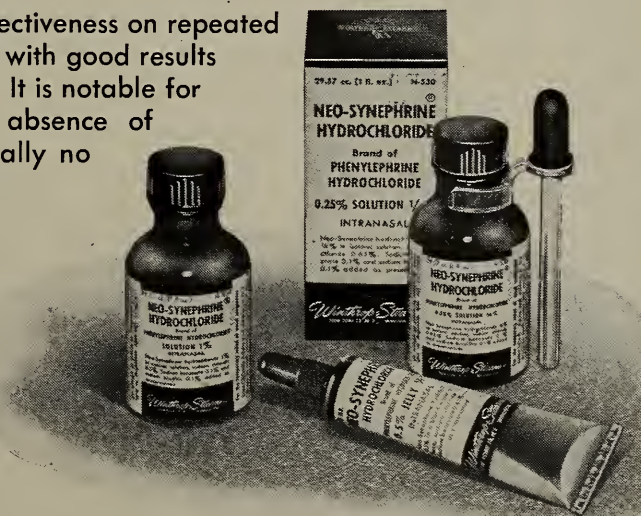
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- ¼% in aromatic isotonic solution of three chlorides—1 oz. bottles.
- ½% water soluble jelly—½ oz. tubes.



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(Continued from Page 962)

## BLUE SHIELD PLANS ENROLLING MORE THAN 10,000 PER DAY

"New members are being enrolled by Blue Shield at a rate of more than 10,000 per day," Frank E. Smith, Director of Associated Medical Care Plans, national co-ordinating agency for Blue Shield Plans, stated recently.

With a net gain of 966,294 members during the first quarter of 1949, Blue Shield headquarters in Chicago announced recently that enrollment in the non-profit medical prepayment plans had reached a total of 11,333,758 on March 31, 1949.

At the present rate of growth, Blue Shield enrollment passed the 12,000,000 mark during June. First quarter growth represented a gain of 8.82 per cent over the total reported at the end of 1948.

The first quarter gain of 966,294 members was approximately 50 per cent better than the first quarter of 1948, when 645,222 members were added by the Plans.

## LEGAL QUESTIONS

At times our members ask questions as to legal rights. These have been referred to our General Counsel, J. Joseph Herbert. A doctor refused to allow photostatic copies of hospital charts and physician's records to be made concerning a patient who had given his written consent for the examination of these records.

Question: Isn't a written statement by the physician, and the hospital, sufficient for their needs?

Answer: Quite obviously we are not in position to answer this question categorically, because we do not know what their needs are. However, it may be stated that a statement by the physician concerning the records would not, as such, be admissible as proof before a judicial tribunal.

Question: Can they be examined by photostatic copies made by the insurance company? Answer: If the patient has given the proper consent, there appears to be no reason why these records cannot be examined and copies made by the insurance company, photostatically or otherwise.

Question: Does this violate the law of confidential information? Answer: The confidential relationship between physician and patient is one which the law has created for the benefit of the patient and not for the benefit of the physician. For this reason the courts have always held that the patient may waive this privilege. Consequently, if the patient has made proper request to the physician or hospital to disclose matters otherwise of confidential nature, no law, rule or custom is violated by the physician or hospital in making the requested disclosure.

Question: Don't the insurance companies need a court order? Answer: If the physician or hospital refuses to make the disclosure requested by the patient, the records could doubtless be subpoenaed or otherwise demanded and the custodian of them brought into court under process. It would seem, therefore, that unless the custodian of the records insists on being subpoenaed and brought into court, it would be simpler to make the disclosure upon request of the patient alone.

These questions are of fairly general interest, and are so presented.

## "COLLECTIVISM IMPERILS U.S."— HOOVER

Former President Herbert Hoover, on the occasion of his seventy-fifth birthday, took time to warn the people of the United States that governmental spending and taxation is threatening the nation with collectivism.

To those who heard the former Presidents address it was evident that his thinking and admonitions would be heeded by many congressional and civic leaders.

Commenting further on the direction America is traveling Mr. Hoover said "Along this road of spending the government either takes over, which is Socialism, or dictates institutional and economic life, which is Fascism."

The ex-presidents remarks were made in an address before 10,000 persons gathered on the Stanford campus in Palo Alto, California.

## LABOR IN DETROIT POLL 12:1 AGAINST COMPULSORY HEALTH INSURANCE

Recently the *Detroit News* conducted a poll "in the heart of a great industrial center, where the CIO claims tremendous strength." The poll covered suggestions to cut Federal appropriations by 10 per cent in the next fiscal year, and asked how the workers stood on Federal aid to housing, education, et cetera, and compulsory social security medicine. The results of the poll among Detroit workers were:

	For	Against
Federal housing .....		6:1
Federal aid to education .....		3:1
National health insurance .....		12:1
The Brannan Farm bill .....		16:1
Proposal to cut Federal appropriations by 10 per cent .....	16:1	
Proposal to support Hoover Commission reorganization plan .....	38:1	

The 1948 tax bill paid by U. S. life insurance companies was \$162,000,000, the Institute of Life Insurance reports.

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# Third Annual Rural Health Conference, October 28-29, 1949

*Grand Rapids Host to State Meeting Under Sponsorship of Michigan Foundation for Medical and Health Education, Inc., et al.*

Down through the years the people of Michigan have enjoyed the recognition and achievement of many "firsts" in medical and health activities. The formation of Michigan Medical Service was an outstanding "first" in this state. It was the initial professionally sponsored, voluntary Medical Care plan "based on service" to reach the million enrollment mark. Another "first" is the outstanding postgraduate medical educational program in which extra-mural courses are brought by eminent teachers to doctors in their home communities. Mention should also be made of the Michigan Rheumatic Fever Control Program which introduced the formation of rheumatic fever diagnostic and consultation centers in strategic parts of the state, thereby interesting more physicians in rheumatic fever and aiding in control of the disease. Outstanding among medical "firsts" was the organization of the Michigan Health Council. The Michigan State Medical Society, together with the Michigan Hospital Association, Michigan Medical Service and Michigan Hospital Service, set up the Michigan Health Council as a non-governmental organization to advance the health of the people in 1943, marking Michigan as one of the pioneer states in Health Council activity. These and many other projects serve to distinguish the foresight and initiative of Michigan's medical profession.

## Two Michigan Rural Health Conferences in East Lansing

Today Michigan is one of the leading states in another worth-while health project; the annual Michigan Rural Health Conference. Plans are now being made to make the Third Annual Michigan Rural Health Conference one which will serve to emphasize further the interest of Michigan's residents in the health of this state.

Much of the credit of this project goes to MSMS which planned and staged the first two Michigan Rural Health Conferences in 1947 and 1948. These Conferences, held on the campus of Michigan State College in East Lansing, brought together rural people, with their representatives, and physicians and allied professional groups to



E. I. Carr, M.D.



H. B. Zemmer, M.D.

discuss and study health problems and the needs of the rural areas.

Leading figures on the 1948 program included U. S. Senator Homer S. Ferguson; State Health Commissioner A. E. Heustis, M.D.; General Paul R. Hawley, Chief Executive of Associated Medical

*(Continued on Page 968)*



## WHEN THE DIET *Needs Supplementation*

Comparison of the accompanying two columns of nutritional values clearly shows why Ovaltine in milk has been so widely accepted as a highly effective *multiple dietary food supplement*.

Column A lists the National Research Council's Recommended Daily Dietary Allowances for each 100 *calorie portion* in the diet of a 154-pound man of sedentary occupation. Column B lists the amounts

of the same nutrients provided by a 100 *calorie portion* of Ovaltine in milk.

	A	B
	N.R.C. Diet	Ovaltine in Milk*
CALORIES .....	100	100
CALCIUM .....	40 mg.	166 mg.
IRON .....	0.5 mg.	1.8 mg.
PHOSPHORUS .....	60 mg.	139 mg.
VITAMIN A .....	208 I.U.	444 I.U.
THIAMINE .....	0.05 mg.	0.17 mg.
RIBOFLAVIN .....	0.08 mg.	0.30 mg.
NIACIN .....	0.5 mg.	1.0 mg.
ASCORBIC ACID .....	3.1 mg.	4.4 mg.
VITAMIN D .....		62 I.U.
PROTEIN .....	2.9 Gm.	4.7 Gm.

\*Based on average reported values for milk. Three servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk, the daily dosage recommended for diet supplementation, provide 676 calories.

The easy digestibility and appealing flavor of Ovaltine in milk enhance its value as a dietary supplement. Chocolate Flavored Ovaltine is especially liked by children.

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Two kinds, Plain and Chocolate Flavored. Serving for serving, they are virtually identical in nutritional content.





### THIRD ANNUAL RURAL HEALTH CONFERENCE

*(Continued from Page 966)*

Care Plans and Blue Cross Commission; Howard Y. McClusky, Ph.D., LL.D., Director, Bureau of Studies and Training in Community Adult Education, University of Michigan.

History in the opening session of the Conference on October 28.

Attendance at the Michigan Rural Health Conference grew to more than 400 persons in 1948, representing more than 70 organizations. Pioneer-



Rural health problems occupied the attention of this group during a discussion period of the Second Annual Michigan Rural Health Conference.

Much of the credit for the success of the first two Annual Michigan Rural Health Conferences goes to H. B. Zemmer, M.D., Lapeer, who ably guided both meetings as chairman. Dr. Zemmer has this year accepted an invitation to act as advisor to the Committee and will also present a review of Michigan Rural Health Conference

ing in this venture, much was learned from the first two meetings, valuable in planning this year's meeting.

#### Third Conference in Grand Rapids

The Third Annual Michigan Rural Health Conference to be held in Grand Rapids on Oc-

*(Continued on Page 970)*



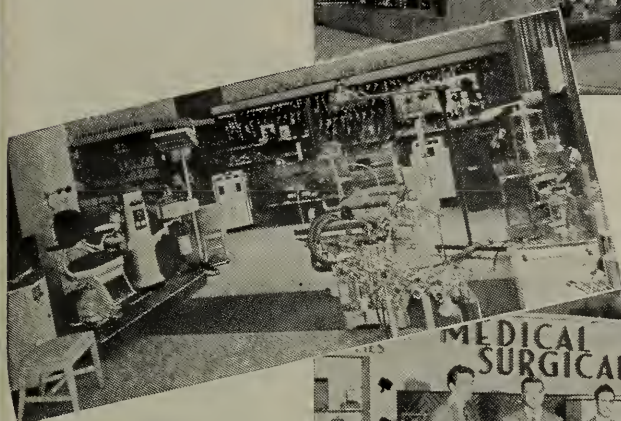
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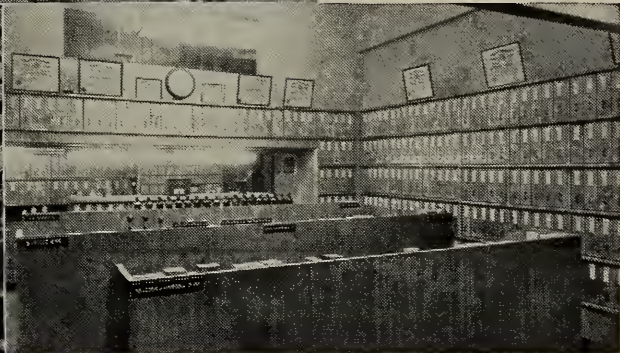
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(Continued from Page 970)

tober 28 and 29, 1949, will incorporate the interesting new features of past meetings as well as introduce new projects.

Some changes in this year's planning involve sponsorship, timing, location and type of program.

The financial sponsorship this year is being furnished by the Michigan Foundation for Medical and Health Education, Inc. E. I. Carr, M.D., Lansing, President of that organization, has been named Chairman of the Conference. This decision, made by the Board of Trustees of the Foundation, further extends to the people of Michigan the Foundation's opportunity of improving its enviable position in rural health progress.

The Conference dates have been changed from mid-September to late October in order to meet at a time more convenient for participation by the rural people in Michigan.

With the idea of taking the Conference "to the people," Grand Rapids was selected as the site for this year's meeting, giving the folks of western and northern Michigan a close-to-home opportunity to attend. If this change is successful, the Conference may be taken to other sections of the state in future years.

Intensive planning for the Third Annual Conference was started in March when the Co-Sponsors of last year's Conference were called together. At this meeting, the offer of the Michigan Foundation for Medical and Health Education, Inc., to financially sponsor the Conference and assist in the planning was announced and accepted. Chairman Carr appointed the following Committee on Arrangements: H. B. Zemmer, M.D., Advisor; H. W. Brenneman, Advisor; W. G. Armstrong, Michigan Grange; C. V. Ballard, Michigan State College; Lulu St. Clair Blaine, Michigan Nursing Center Association; Milon Grinnell, Michigan Farmer; Marjorie Karker, Michigan Farm Bureau; A. J. Phillips, Ph.D., Michigan Education Association; Graham Davis, W. K. Kellogg Foundation; Ira Dean, Kent County Welfare Department; R. J. Hubbell, M.D., Chairman, Rural Health Committees, MSMS; Austin Pino, Rural Enrollment, Michigan Hospital Services; Henry Vaughan, Ph.D., University of Michigan; J. K. Altland, M.D., Michigan Department of Health. This Committee has since met on two occasions and out of these meetings have come plans for a well rounded program which include

three main speakers, a discussion period in which delegates will divide into groups representing geographical areas to discuss health topics of their own choosing, and a cinema room in which recent films on farm safety and rural health will be shown. Another feature in the program for Saturday morning will be group discussions on four health topics selected by a poll of persons attending last year's Conference. Those persons polled were asked to pick four subjects from the list of 16 and a point-system tabulation was worked out to record the topics receiving the greatest number of points. Final results indicated the people were interested in discussing the following topics:

1. "Obtaining and Retaining M.D.s in Rural Areas"
2. "Community Health Education"
3. "Rural Public Health"
4. "Medical Care Facilities"

#### Michigan Health Council Co-operating

The Michigan Health Council has been given the responsibility and privilege of assisting in the planning of this year's Conference, and Eugene H. Wiard, Lansing, Executive Secretary of the Health Council, is handling the details as Secretary of the Conference.

Conference headquarters have been established at 706 N. Washington Avenue, Lansing.

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#### COMMUNITY HEALTH COUNCILS

Community health councils are the best answer to the problem of making doctors' services most effective, Dr. James R. Miller, Trustee AMA, declared, pointing out that the doctor's bill represents only a fourth of the medical expense dollar paid by the American people, and that this proportion is decreasing and not increasing.

"Wherever community health councils have been developed, they have been found effective in promoting the community's health program and in keeping its development in perspective against the community's program as a whole," Dr. Miller said, adding:

"Strong community effort must get behind the establishment of well-equipped local health department, for these are the cornerstones of community health progress."



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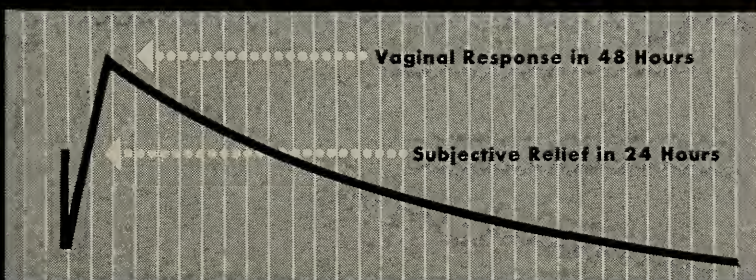
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### RAPID AND PROLONGED BENEFIT



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# PR In Practice

## Editorial Bouquets for:

Top spot in this month's column goes to J. L. Leach, M.D., hardworking Flint physician, for his work with the groups associated in the program of the NAACP . . . Among the groups which have passed resolutions following his efforts are the Michigan State Association of Colored Women . . . . . Auxiliary-wise Mrs. Harry Weitz of Traverse City takes personal honors for her work in her area . . . Two of her chief co-workers are Mrs. Irwin Ziehlke who has turned in eighty-five names and Mrs. Ben Bushong with more than forty-five . . . Still in the Ladies Department, mention should be made of the excellent leadership provided the Wayne County Auxiliary by Mrs. W. W. MacGregor who got the CAP program off to a flying start . . . More resolutions from outstanding organizations including the Michigan junior chamber of commerce, Michigan Association of Collection Agencies, Inc., Michigan Chiropody Association, Michigan State Pharmaceutical Association, Michigan State Dental Society, Michigan Department of Veterans of Foreign Wars, and many others . . . especial credit and thanks to the many Chambers of Commerce throughout the state which have gone on record against socialized medicine via resolution . . . E. S. Gurdjian, M.D., Detroit surgeon, has stimulated the particular doctors on his CAP list through periodic luncheon meetings . . . He accomplishes the same as individual contact and secures additional impetus through questions and exchange of ideas face-to-face . . . Fred H. Drummond, M.D., Councilor from Kawkawlin, has sent in additional names for his "List of 20" to take the grand total over the 1,000 name mark—can anyone top this? . . . H. B. Zemmer, M.D., Lapeer, has been busy speaking to the Rotary Clubs in his area . . . another active speaker in Southern Michigan is T. Scott Moore, M.D., of Niles . . . Mrs. Donald Cowan of Sault Ste. Marie is working hard with the newly organized auxiliary in her district . . . first task cut out for their members is the CAP program . . . Drs. Merle G. Wood and C. H. Flint of Hart are to be congratulated for their dinner meeting of leading citizen workers in their town . . . another letter-writing champion is certainly C. W. Shipman, M.D., of Flint who has written a personal letter to every one of his patients telling of the dangers in socialized medicine . . . Huron County is hearing a lot against socialized medicine from R. C. Dixon, M.D., as he travels the county on speaking engagements . . . The civic and professional leaders of Livingston County attended a meeting arranged by H. C. Hill, M.D., of Howell where the

dangers of socialized legislation were presented . . . Macomb County members lead by G. F. Moore, M.D., made fifteen public speaking appearances in their county last month . . . F. J. Kemp, M.D., Oakland County CAP chairman, is personally seeing that all drug stores in his county are supplied with literature . . . The rural population in Washtenaw County is being reached through well-laid plans of Drs. Robert Ideson and R. W. Teed . . . Flint's O. C. Pratz, M.D., leader in the State V.F.W., was responsible for the resolution from that group . . . The letter from Flint's CAP chairman, Henry Cook, M.D., to his committee members will go a long way to keep everyone busy during the summer months . . . truly an inspirational letter . . . The Bay County Bar Association is first such group to take stand against socialized medicine that we've heard of . . . There are still a lot of you who are doing commendable work in your own CAP plan but who fail to get proper recognition . . . report your work to the PR Field Secretary or your own CAP leader and it can be noted in *THE JOURNAL* . . . Let's try to give everyone the credit that is due.

L. W. HULL, M.D., *Chairman*  
Special Committee on Education

\* \* \*

## Materials Available from MSMS

The battle against socialized medicine is moving into high gear and the medical profession is hard at work to protect any advantage it may hold at present. Much of the "grass roots" education is being accomplished through widespread distribution of pamphlets. Effective work is being done through the enclosure of some of this literature in statements, letters and through wrapping in packages at retail outlets such as drug, grocery and department stores. Why not try this in your town or city?

The following materials are available in quantity by requisition to the MSMS at 2020 Olds Tower, Lansing, Michigan, or through requests of the PR Field Secretary in your area:

- No. 5—*Doctor, My Statistics Feel Funny*—An analysis of the draft rejection statistics as reprinted from Nations Business magazine.
- No. 17—*Government Medicine in New Zealand*—The story of socialized medicine in New Zealand and its social, economic and political implications.
- No. 18—*Compulsory Health Insurance*—The first of the AMA pamphlets to tell the story for lay consumption.

(Continued on Page 974)



## Building stones

Tissue repair is the keystone of the recovery process. It makes little difference if the infection is halted, the fracture reduced, or the metabolic imbalance adjusted—it is the patient's own cells that must complete the cure.

While true hypoproteinemia is comparatively rare, nevertheless hypernutrition with essential amino acids during the

recovery process has been shown empirically to speed the patient upon the road to normal health. Amino acid preparations should be supplemented by moderate amounts of vitamins.

*Lederle* research has for some time been concerned with such mixtures of amino acids and vitamins and their application in the field of nutrition.

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AUGUST, 1949

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973



# Michigan Medical Service

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## FARM ENROLLMENT IN MMS

Increased rural interest in the Blue Cross surgical and medical-surgical plans is shown by the recent enrollment of thirty-six new Farm Bureau groups in one or both of these plans.

Between January 1 and June 1 of this year, thirty-seven new Farm Bureau groups were Blue Cross-enrolled. Of these groups, only one enrolled for the hospital care plan alone. Nine of the thirty-seven groups enrolled for hospital-medical-surgical protection, and twenty-seven took the hospital-surgical protection.

A total of 557 new surgical contracts were issued to families in these thirty-six Farm Bureau groups, and of these contracts, 129 provide also for medical-surgical protection.

It is interesting to note that only seven people in the thirty-six groups took the hospital protection alone.

In addition, during the same period, 3,092 new subscribers applied for Blue Cross protection through Farm Bureau groups that had been Blue Cross—enrolled prior to 1949, with approximately 10,000 persons being made eligible for Blue Cross care.

The enrollment of the thirty-six new Farm Bureau groups in the surgical and medical-surgical plans made 1700 additional persons eligible for this protection.

There are approximately 32,000 Blue Cross members in Farm Bureau groups enrolled in the Michigan Medical Service plans. Four hundred and fifty Farm Bureau Discussion groups—or 70 per cent of the total number of discussion groups using Blue Cross services—are enrolled for the surgical or the medical-surgical plans.

Rural people are enrolled in Blue Cross primarily through Farm Bureau discussion groups and granges. Fifty-seven granges are enrolled, and of this number, twenty-three are enrolled for hospital-surgical protection, and eight are enrolled for hospital-medical-surgical care.

Approximately 1,550 Blue Cross members are enrolled in Michigan Medical Service through the grange groups, and all new grange groups making

application for Blue Cross protection are applying for either the hospital-surgical or hospital-medical-surgical plans.

In a rural group at Hartland, in Livingston County, 170 of the 258 Blue Cross contracts include Michigan Medical Service protection.

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## PR IN PRACTICE

### Materials Available from MSMS

(Continued from Page 972)

No. 23—*American Medicine Answers President Truman*—A doctor's diagnosis of the President's Compulsory Health Insurance program.

No. 24—*The Voluntary Way Is the American Way*—Fifty questions and answers most frequently encountered in discussion of government medicine.

No. 25—*Your Medical Program . . . Compulsory—or—Voluntary?* A well written booklet suitable for lay readers in which comparison is made between voluntary and compulsory health insurance systems.

## PR Field Secretary Changes

Due to a consolidation of activities and a high degree of CAP organization throughout the state, the MSMS Special Committee on Education has made several changes in the field personnel assigned to help in carrying out the CAP program.

Mr. Stuart Campbell of Grand Rapids, PR Field Secretary in Western Michigan, has been given additional territory—the Northern area. Mr. John Guy Miller, Field Secretary for Wayne County will add the Eastern Area of Michigan to his present duties.

Miss LaRita Jones, Field Secretary for the Woman's Auxiliary throughout the entire state, will remain in that capacity.

Complete addresses for the Public Relation Field Secretaries are as follows:

*Woman's Auxiliary.*—Miss LaRita A. Jones, 4421 Woodward Avenue, Detroit, Michigan, Tel—Temple 1-2205.

*Western-Northern.*—Mr. Stuart A. Campbell, 658 Cherry Street, Grand Rapids, Michigan, Tel—8-8291.

*Wayne-Eastern.*—Mr. John Guy Miller, 4421 Woodward Avenue, Detroit, Michigan. Tel—Temple 1-2205.

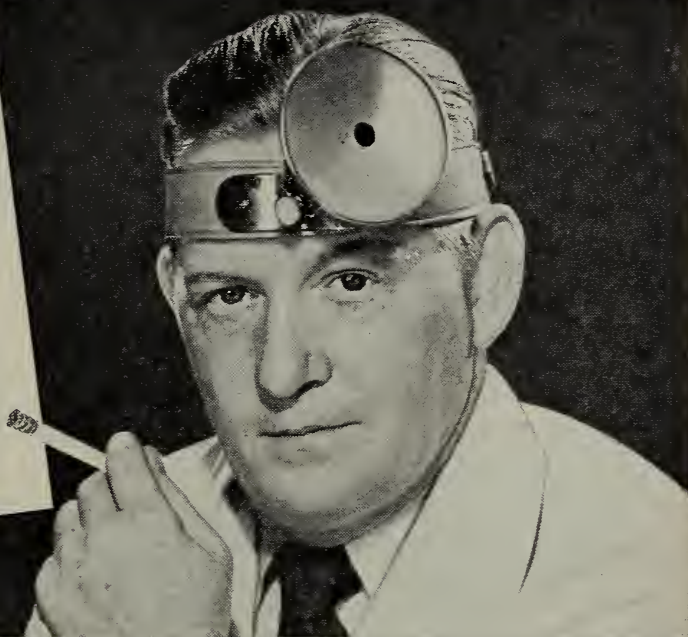
*Central Area.*—Mr. R. F. Staudacher, 2114 Olds Tower Bldg., Lansing, Michigan. Tel—4-4429.

# How mild can a cigarette be?

## DOCTORS REPORT

In a recent test of hundreds of people who smoked only Camels for 30 days, noted throat specialists, making weekly examinations, reported

**"NOT ONE SINGLE CASE OF THROAT IRRITATION DUE TO SMOKING CAMELS!"**



## SMOKERS REPORT

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*Rita Edwards*  
TELEPHONE OPERATOR



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# Political Medicine

## SOCIAL SECURITY ABROAD

At a meeting at the Palmer House on Tuesday, June 28, Gerhard Hirschfeld, Director of the Research Council for Economic Security, told representatives of management that "it is a popular misconception that governments abroad go much farther in providing compulsory social security than government in the United States. But it is true that voluntary social services are much more developed by the communities than is the case in our own country."

Back from a six-week visit to European capitals, Hirschfeld said: "Management in general has been remarkably successful in some countries to restrain the blind expansion of compulsory social security. Cases in point are Denmark, Sweden, Switzerland and Holland. In other countries, especially Great Britain, management has utterly failed to cope with the problem. Why management should be so successful in one case, so lamentably failing in the other, is something to which we in this country want to give careful consideration."

The cost of compulsory social security abroad is not as high as generally thought. Great Britain and other countries spend about 6 per cent of their national income on social security and an additional 3 or 4 per cent on related matters such as housing, labor markets, and other services. It is not generally realized that much of the social security systems in the smaller countries is entirely voluntary. In contrast, here in the United States it is proposed to include most social security in a compulsory system.

Nor was the idea of the welfare state found to be prevalent abroad.

"Outside of Great Britain," Hirschfeld continued, "I found the attitude of the people to be exactly the opposite. Mostly, they stand proudly on their own resources and on their traditional independence."

With regard to labor, he said he found many examples in France, Switzerland, Holland, and Scandinavia to indicate that the average worker would rather have recognition of his own importance than have social security benefits.

The cost of social security is very high in France, where the employer pays an average social security tax of 35 per cent on pay roll. In Great Britain, the high cost of social security is held responsible for the fact that the income tax on business establishments averages 45 per cent, where otherwise it might be nearer 35 per cent. In contrast, in the smaller countries a business establishment rarely pays more than 10 per cent of pay roll for social security.

"Health services in Great Britain," Mr. Hirschfeld pointed out, "require a very substantial administrative staff, of whom more than 30,000 are paid employees and at least an equal number are voluntary workers."

Mr. Hirschfeld estimated that a comparable system of medical and hospital care in the United States would require at least 200,000, and possibly as many as 300,000 employees, partly paid and partly voluntary.

## CONSULTANTS ADVISED NOT TO SIGN

*The Joint Committee of the Royal Colleges, the Royal Scottish Corporations, and the Central Consultants and Specialists Committee sent the following letter to the Ministry of Health on July 5.*

Dear Sir William,

The Joint Committee at its meeting today, after considering the views of its constituent bodies, passed the following resolutions:

1. The Joint Committee finds itself unable at present to advise consultants and specialists to enter into permanent contracts on the basis now offered by the Minister.

2. The Joint Committee finds it essential to reopen discussions with the Minister on the following points:

(i) There should be established for consultants and specialists a permanent negotiating machinery, the Minister or the representatives of the profession having the right, in the event of disagreement, within an agreed range of subjects, to refer the matter for settlement by arbitration, both parties being bound by the award of the arbitrator.

The agreed range of subjects should include any terms and conditions of service affecting remuneration.

The form of contract should be revised so as to make it clear that the terms and conditions of service offered are those which have been agreed with the profession or determined by arbitration, and not "determined from time to time by the Minister of Health."

(ii) Facilities for private treatment in hospital should be maintained and developed throughout the country for those who desire them.

(iii) Information concerning the remuneration of part-time clinical teachers should be available before the practitioners concerned are called upon to sign permanent contracts.

3. In the meantime the Joint Committee recommends consultants and specialists not to sign permanent contracts until further advice is tendered by the Joint Committee.

The Joint Committee desires an interview in order to discuss these resolutions.

Yours sincerely,

(Signed) LIONEL WHITBY,

*Chairman of the Joint Committee.*

—*British Medical Journal*, July 9, 1949



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# Editorial Comment

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## COST OF MEDICINE CANNOT BE OVERLOOKED

There was a short bit of news out of Harbor Springs recently which goes a long way toward explaining why improved medical services cannot be achieved overnight and cannot be conjured up by the magic wave of a government wand.

The council of the state medical society was holding a meeting. Among other reports it heard one from its committee which is seeking to increase the number of doctors trained by Michigan medical schools. That report may be something of a shock to the average person.

Dr. Earl I. Carr of Lansing, chairman of the committee, told the council that it would cost \$12,000,000 merely to boost by 107 the number of medical students at the University of Michigan. That much would be necessary to increase the physical facilities and the teaching staff. Moreover, it would cost almost a million dollars a year besides in order to maintain the expanded facilities.

The figures show why government medicine could offer no guarantee that more persons could visit a doctor more often.

Yet the United States leads the world in the number of doctors available to the public, despite the controls, the compulsory insurance schemes and the "guarantees" which have been in effect in Germany, England and other nations for years.

The free practice of medicine in America has led to the highest professional standards in the world. But the results reflect heavy expenditures which preclude "free" services.—Editorial, *Battle Creek Enquirer and News*, July 12, 1949.

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## STATE MEDICINE

Some of the more noisy advocates of state medicine—drawing shaky parallels from Great Britain—are trying to make the issue for Canada a straight one of black and white. They imply that we must either bring the medical profession and hospitals and everything connected with them under Government control or leave the mass of our population helpless before the threat of crushing fees and bills.

This is not fair to the medical profession nor to those who are trying to reconcile freedom from arbitrary state direction with the very urgent need of protecting the average Canadian family from facing costs that can put them in debt for life.

There are indeed thousands—hundreds of thousands—of Canadians who are benefiting from

group health plans in industry and from Government contributions, and from other sources of low-cost insurance guaranteed to break the back of sudden and heavy medical expenses.

Dr. William Magner, of Toronto, president of the Canadian Medical Association, urged in convention in Saskatoon Wednesday that an expansion of these present voluntary health insurance plans is the best substitute for the "colossal gamble" of socialized medicine in the Dominion.

Doctors fear generally, he declared, "that state control will lead to deterioration in the conditions of medical practice and in the quality of medical care, with disastrous effects upon the people. . . . The problem of the provisions of adequate medical care for people in the low and middle income groups can be solved by proper reorganization and expansion of the voluntary health insurance plans which are now operating. . . ."

No matter how an individual may feel about Great Britain's state medicine, or even the Saskatchewan experiment, it is an unchallenged fact that the cost of such schemes returns savagely to plague the taxpayer. There is bitter disillusionment about the cost of this "free" service. Doctors and patients run into infinite red tape and frustrations. It is no cure-all.

Government in this field can do far more than it has to help people themselves without risking the boomerangs of state medicine. Low-cost insurance is the most effective safeguard of all. It combines freedom with safety and removes the risk of a huge state gamble. Politicians who offer free medical services are deceiving the public. It is too big and too important an issue to be treated from the hustings.—Editorial, *Hamilton Spectator*.

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## THE FIGHT MUST CONTINUE

The members of the American medical profession, collectively and individually, have rendered a valuable service to the American people through the continued fight against compulsory health insurance which would serve as the entering wedge designed to split asunder the whole structure of American freedom.

Let every member of the medical profession gird his loins and put his shoulder to the wheel in order that we may not roll backward into the slough of despair where the profession and the people can only share their ill fate and lament their lost freedoms.—Editorial, *Journal of the Oklahoma State Medical Association*, August, 1949.

# The JOURNAL

*of the Michigan State Medical Society*

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## Evaluation of the Cardiac Patient as a Surgical or Obstetrical Risk

By I. Donald Fagin, M.D., F.A.C.P.

Detroit, Michigan

IN ADDITION TO the complications inherent in the course of their heart diseases, cardiac patients are subject also to the usual vicissitudes of existence. The superimposition of pregnancy or of the necessity for a major surgical procedure in a patient with pre-existing heart disease demands keen judgment on the part of the medical attendant. The balance between the patient's cardiac reserve and the need for an operation or child-bearing must be weighed carefully, with full appreciation of the problems involved in carrying a cardiac patient through the rigors of a pregnancy or an operation. We shall review these problems in general fashion, and discuss the factors which must be considered in the evaluation and management of the cardiac patient as a surgical or obstetrical risk.

### Diagnosis

In the absence of a record of previous examinations, the diagnosis of heart disease during pregnancy may occasionally be exceedingly difficult, particularly in the last trimester. The alterations in circulatory dynamics produced by the pregnancy itself may simulate the findings in heart disease.<sup>7,8</sup> Dyspnea, palpitation, and a rapid pulse are common concomitants of pregnancy. Elevation of the diaphragm with resultant shift of the heart to a more transverse position may suggest cardiac en-

largement clinically. Systolic murmurs at the apex and/or base are almost the rule. Accentuation and splitting of the second pulmonic sound occur frequently. There is an increase in cardiac output, blood volume, and venous pressure, with resultant slight increase in venous engorgement and dilatation of the superficial veins of the thorax and abdomen as well as of the legs. A slight amount of dependent edema is common. The blood viscosity decreases slightly and the rate of blood flow is accelerated. The pulse pressure is widened, and the similarity of some of the circulatory changes to those seen in arteriovenous aneurysm has suggested the possibility that the placenta acts as an arteriovenous shunt. These significant effects on the circulation in pregnant women with normal hearts are indicative of the strain which pregnancy would add to a damaged heart.

Rheumatic heart disease is the most common type encountered during the child-bearing years. However, the establishment of a diagnosis of rheumatic heart disease in a pregnant woman is only the first step. The presence or absence of activity of the rheumatic fever must be determined, the valvular lesions defined, the degree of cardiac enlargement gauged, and the possibility of complications such as bacterial endocarditis, congestive failure, or serious arrhythmias must be ruled out. The use of an elevated sedimentation rate, a mild anemia, and a slight leukocytosis as indices of rheumatic activity is not tenable in pregnancy, since pregnancy itself may cause such changes. The presence of rheumatic activity is best decided on clinical evidence, although in an occasional instance the electrocardiograph may be helpful.

The recognition of early congestive failure during pregnancy may be difficult because of the resemblance of some of the signs and symptoms of pregnancy to those of cardiovascular insufficiency.

From an address to the staff of the North Detroit General Hospital, October 26, 1948.



Hepatomegaly and persistent moist basal râles are fairly reliable signs of failure in these patients, although the dry râles of basilar atelectasis secondary to elevation of the diaphragms may occasionally be confusing, and the distended abdomen may obscure hepatomegaly.

The differential diagnosis of heart disease and surgical conditions of the chest or abdomen may be notoriously difficult. The right upper quadrant pain and nausea produced by distention of the liver capsule may simulate gall-bladder disease, and the differentiation of myocardial infarction from surgical emergencies of the upper abdomen is too well known to warrant repetition. The abdominal pains of rheumatic peritonitis may be difficult to differentiate from acute appendicitis. Patients with unsuspected thyrotoxic heart disease in whom tachycardia may be the outstanding finding have been thrown into severe thyroid crises by relatively minor surgical procedures.

Having avoided the pitfalls of differential diagnosis, and having arrived at a diagnosis of heart disease in a pregnant woman or a patient with a surgical problem, the decision as to whether to permit the pregnancy to continue or, in the other instance, to operate depends on balancing the need for children or for the operation against the patient's cardiac reserve. Other elements also enter into consideration. For example, it is obvious that of two pregnant young women with mitral stenosis, the one who is sufficiently well endowed with the world's goods to afford a housekeeper, a nurse, and a governess would be a better risk than the one who (other factors being equal) has to work as a waitress or cashier until the last month or two and would have little or no help in caring for the baby after delivery. Also, the contemplation of pregnancy by a nulliparous cardiac patient presents a more trenchant problem than an analogous situation in a multipara.

Similarly, the need for surgical intervention in a middle-aged cardiac patient with auricular fibrillation who develops a mesenteric embolus is obviously urgent as compared with the need for cholecystectomy in a similar patient suffering from intermittent attacks of biliary colic.

In the determination of the patient's tolerance for pregnancy or operation, the best gauge is the history. No laboratory studies yet available offer us as reliable a guide to the patient's cardiac reserve as his ability to engage in physical activity.

The degree of exertion at which the patient with a damaged heart develops dyspnea, fatigue and/or angina is determined from the history. In evaluating dyspnea and fatigue, such factors as age, obesity, pulmonary affections, anemia, et cetera, must also be kept in mind, lest the heart be blamed for more than its share of the disability.

We will be less apt to omit important data relative to the patient's cardiac reserve, if we formulate our diagnoses in systematic fashion. The utilization of the pattern for cardiac diagnosis recommended by the New York Heart Association<sup>11</sup> facilitates the description of heart diseases and should be more widely taught and applied. With this system, cardiac diagnoses are classified according to etiologic, anatomic, physiologic, functional, and therapeutic considerations. The functional and therapeutic classifications indicate, respectively, the amount of physical activity the patient *can* engage in and that which he *should* engage in, and are as follows:

#### *Functional Classification:*

"Class I. Patients with cardiac disease and no limitation of physical activity. . . . Patients in this class do not have symptoms of cardiac insufficiency, nor do they experience anginal pain.

"Class II. Patients with cardiac disease and slight limitation of physical activity. They are comfortable at rest. If ordinary physical activity is undertaken, discomfort results in the form of undue fatigue, palpitation, dyspnea or anginal pain.

"Class III. Patients with cardiac disease and marked limitation of physical activity. They are comfortable at rest. Discomfort in the form of undue fatigue, palpitation, dyspnea, or anginal pain, is caused by less than ordinary activity.

"Class IV. Patients with cardiac disease who are unable to carry on any physical activity without discomfort. Symptoms of cardiac insufficiency, or of the anginal syndrome, are present, even at rest."

#### *Therapeutic Classifications:*

"Class A. Patients with cardiac disease whose physical activity need not be restricted..

"Class B. Patients with cardiac disease whose ordinary physical activity need not be restricted, but who should be advised against unusually severe or competitive efforts.

"Class C. Patients with cardiac disease whose ordinary physical activity should be moderately restricted, and whose more strenuous habitual efforts should be discontinued.

"Class D. Patients with cardiac disease whose ordinary physical activity should be markedly restricted.

"Class E. Patients with cardiac disease who should be at complete rest, confined to bed, or chair."

To illustrate the nomenclature, a patient with a double mitral lesion with congestive failure and auricular fibrillation might be classified as follows:

*Cardiac:*

Etiologic: Rheumatic fever, inactive.

Anatomic: Mitral stenosis and insufficiency, cardiac enlargement.

Physiologic: Auricular fibrillation, cardiac insufficiency, pulmonic incompetence (Graham Steell murmur).

Functional: Class IV.

Therapeutic: Class E.

Presentation of the diagnosis in such fashion serves as a synoptic clinical and pathologic description of the patient's heart disease, and an estimation of the patient's cardiac reserve.

### Prognosis

In attempting to prognosticate the probable course of cardiac patients subjected to an operation or pregnancy, the cumulative effects of the underlying heart disease and of the superimposed complications both must be assessed. Assuming the correctness of the cardiac diagnosis, we have to determine whether the patient's life expectancy is sufficient to warrant undertaking pregnancy or an operation. In general, as we have already remarked, the additional risk imposed by an operation or pregnancy varies directly with the degree of impairment of the patient's exercise tolerance. There is an additional hazard in those patients whose cardiac disease is of such nature that sudden death may occur at any time during its course. Such rapid exodus may occur in arteriosclerotic heart disease with the anginal syndrome or coronary thrombosis, in syphilitic heart disease with coronary ostial stenosis, aortic insufficiency or aneurysm, in rheumatic heart disease with aortic stenosis, and in instances of complete auriculo-ventricular block.

As a general rule we may say that cardiac patients who are in Functional Class II and Therapeutic Class B, or better, are subject to only a very slight increase in risk above patients with normal hearts. Patients in Functional Class III or therapeutic Class C, or worse, involve much more serious risks.

The unremitting strain which pregnancy imposes on the circulation may lead to congestive failure in the patients with a damaged heart. This occurs most commonly in the seventh and eighth

months of pregnancy, when the load on the circulation is heaviest. The initial development of congestive failure is less common in the last month of gestation ("lightening"), at parturition, or in the postpartum period, although in a recently reported series<sup>4</sup> there were more instances of failure in the last month than in any previous month. Occasionally in the postpartum period, when the uterus is contracting, the expression of blood therefrom into the general circulation acts somewhat like a transfusion and increases the strain on the heart.

Patients with established auricular fibrillation are subject to a high mortality rate during pregnancy. This high mortality is due not so much to the auricular fibrillation *per se*, as it is to the fact that auricular fibrillation is usually seen in rheumatic heart disease of relatively long duration and is a late development in the disease. For similar reasons, patients who have had episodes of congestive failure in the past are poor risks for pregnancy, as are rheumatic cardiac patients who are past thirty years of age. The number of previous pregnancies, the number of recurrences of rheumatic activity in the past, or a history of an embolic episode in the past do not seem to exert any deleterious effects on the prognosis. We often hear it stated that rheumatic cardiac patients who have gone through previous pregnancies without particular difficulty should anticipate no trouble with another contemplated pregnancy. However, like most generalizations, this statement is inapplicable to the individual instance because it ignores the element of progressive impairment which characterizes the rheumatic inflammatory process which caused the valvular lesion. The mechanical embarrassment of the circulation caused by the valvular lesion may have progressed markedly since the patient's previous pregnancies. Particularly is this true of mitral stenosis, which is the most progressive form of rheumatic heart disease.

Bunim and Rubricius<sup>4</sup> recently reported a series of 131 rheumatic cardiac patients delivered of 133 babies at Bellevue Hospital with an over-all maternal mortality of 1.4 per cent. They surveyed the literature of the previous ten years and found reports of 158 deaths among 4,869 pregnant women with rheumatic heart disease (including their own cases), a mortality rate of 3.24 per cent. In their own series, the infant mortality was more than three times as great in infants delivered of



mothers in failure, as it was in infants delivered from mothers with normal hearts or mothers with rheumatic heart disease but without failure. The combination of mitral and aortic valvular disease seemed to have no more adverse effect on maternal mortality than did mitral valvular involvement alone.

The influence of pregnancy on the course of rheumatic heart disease was analyzed by Cohn and Lingg (quoted in reference<sup>4</sup>), and it was found that "there was no significant difference in the tempo of the clinical course, the rate of development of congestive heart failure, the duration of life from onset of disease to death, and the age at death in the parous and nulliparous groups." Boyer and Nadas<sup>2</sup> also found that pregnancy appears to have no particular ill effect on the course of rheumatic heart disease. For a thorough and comprehensive review of pregnancy in heart disease, the monograph of Hamilton and Thomson should be consulted.<sup>8</sup>

In the additional risk which an operation imposes on the cardiac patient, the severity of the operation contemplated is only one of the factors which enters into consideration. The skill of the surgeon and anesthetist, their appreciation of the problem presented by the cardiac patient with respect to water and electrolyte balance and bed rest, and their willingness to modify preoperative, operative, and postoperative routines in the best interests of the patient are essential elements. It is important to recall that surgical procedures may reactivate a latent rheumatic fever, that shock, hemorrhage, or dehydration may lead to myocardial infarction in a patient with damaged coronary vessels, that operations on septic foci may lead to subacute bacterial endocarditis in patients with valvular lesions, that overhydration may lead to pulmonary edema and death in susceptible patients, that prolonged bed rest may have detrimental as well as advantageous effects in cardiac patients, and that restriction of respiration by tight upper abdominal dressings may be intolerable to a mildly dyspneic cardiac patient. Even with the current trend toward early postoperative ambulation, the foregoing comment about bed rest deserves some elaboration. Elderly cardiac patients are particularly susceptible to hypostatic pneumonia and to thrombophlebitis with the possibility of pulmonary embolism when restricted to bed, unless precautions are taken against these eventual-

ities. Occasionally, patients with so-called right ventricular failure (edema, hepatic engorgement, et cetera) may develop pulmonary edema as a result of postural fluid shift when they are restricted to recumbency.

### Management

The proverbial ounce of prevention is the wisest measure to apply with respect to pregnancy in heart disease. In a patient with signs or a history of congestive failure, or with established auricular fibrillation, or in a patient who has experienced cardiac difficulties with a previous pregnancy, it is best to interdict pregnancy if at all possible. If such a patient insists on becoming pregnant, she should be thoroughly acquainted with the risk both she and the infant run, and with the possibility that she may have to spend most of her pregnancy at rest.

A pregnant woman with rheumatic heart disease, should be under the closest observation of her medical attendant, with interviews at weekly intervals through most of her pregnancy, so that the earliest signs of failure can be promptly recognized if they develop, and proper treatment instituted. Upper respiratory infections, gastrointestinal upsets, or overexertion may lead to failure in these patients. Excessive weight gain should be prevented by proper dietary restrictions in order to avoid adding the burden of obesity to the circulation. Properly fitted obstetrical corsets are recommended to minimize the circulatory strain of postural disturbances.<sup>12</sup> Special attention should be given to the prevention of anemia.

The treatment of congestive failure during pregnancy consists of the usual measures of digitalization, sodium restriction, and judicious rest. If diuretics are found necessary, it is probably wiser to use the xanthines or the acidifying salts rather than the mercurial diuretics. If a patient develops failure in the early months of pregnancy, interruption of the pregnancy is indicated after treatment for failure has been instituted. When failure supervenes in the sixth month or later, all attempts should be made to carry the patient through to term or very shortly before, because it may be anticipated that the load on the circulation will lighten during the ninth month. Hospitalization for at least a week or two prior to the anticipated date of delivery is advisable for thorough study and preparation of the patient. Vaginal delivery

rather than abdominal section appears to be preferable, since it is dubious that the surgical procedure entails less hardship for the patient and since the possibility of infection and embolism is increased by an operation. However, there is much difference of opinion on this score, and one of arguments which advocates of surgical interruption have is that patients in whom interruption of pregnancy is indicated for cardiac reasons should be sterilized.

If, during the first stage of labor, the patient develops dyspnea, tachycardia, or other signs of cardiovascular distress, rapid digitalization is indicated, plus supportive measures such as oxygen administration.<sup>9</sup> The second stage of labor should be shortened as much as is consistent with good obstetrical practice in order to minimize the strain of bearing-down. Patients with mitral stenosis may develop severe pulmonary edema during labor, and venesection (with subsequent slow replacement of the blood if necessary) may be life-saving. A patient who is orthopneic prior to delivery should be placed in a Fowler position on the delivery table. The use of spinal or caudal anesthesia assists in the prevention of pulmonary edema by reducing vasoconstriction in the anesthetized areas and permitting the pooling of blood therein, thus reducing the venous return and simulating the effect we produce when we inflate blood pressure cuffs on the extremities in the "bloodless phlebotomy" we sometimes use in the treatment of pulmonary edema. Intravenous fluids should be used with great caution, if at all, following delivery in cardiac patients.

In dealing with cardiac patients subjected to an operation, preoperative and postoperative medication must be individualized. Patients in congestive failure who require an operation obviously should be restored to the best possible level of cardiac efficiency compatible with the time available. The routine administration of preanesthetic medication without consideration of the patient's age, size, cardiac and renal status is poor medical practice. Barbiturates, morphine, and atropine are the most commonly used preanesthetic drugs. The barbiturates are excellent drugs when used properly, but we must remember that they are excreted mainly by the kidneys. Therefore, in a patient with hypertensive heart disease secondary to arteriolar nephrosclerosis, chronic glomerulonephritis, or obstructive uropathy, or in a patient with

congestive failure, we must be certain that the renal function is adequate to handle the dose of barbiturate administered. Barbiturates should be given sufficiently long in advance of morphine to avoid cumulative depressive action on the respiratory center. Occasionally, patients react with marked excitement to some of the barbiturate preparations, and such reactions must obviously be avoided in cardiac patients if at all possible. Morphine occasionally may produce arrhythmias in susceptible patients as a result of vagus center stimulation, and it may depress compensatory circulatory reflexes called into action by blood loss, but the major effect we must be careful about in cardiac patients is the respiratory depression induced by morphine. Elderly patients are particularly susceptible to morphine and may develop Cheyne-Stokes respiration following its use. Nausea and vomiting sometimes follow the administration of morphine and are hardly conducive to rest. Sometimes, as with the barbiturates, excitement may follow morphine administration. Therefore, in elderly cardiac patients who have to undergo an operation, morphine should be avoided if possible. Atropine may accelerate the heart rate without increasing the cardiac output.

As Blumgart points out in his excellent review of this subject,<sup>1</sup> it is always wisest, if at all possible, to test cardiac patients several days before operation with the drugs that are expected to be used, in order to rule out hypersensitivity or other untoward reactions. The patient should be acquainted with the feel of an oxygen mask so that if oxygen is found necessary postoperatively, the patient will not be panicstricken. Postoperative medication requires even more judicious consideration. Posterior pituitary extract used to prevent or counteract postoperative gas distention has a vasoconstrictor and hypertensive effect, and should be used only with the greatest caution in arteriosclerotic or hypertensive cardiac patients. The institution of intestinal suction and/or oxygen inhalation to treat distention is wiser in these patients. The use of ergot derivatives following uterine curettage in patients who may have coronary artery disease is dangerous, since it may cause angina, probably as a result of coronary constriction. The use of carbon dioxide-oxygen mixtures to accelerate the removal of inhalation anesthetics from the lungs should be avoided in cardiac patients because the carbon dioxide causes



an increased cardiac output, splanchnic vasoconstriction, and a rise in blood pressure. In patients with diabetes and arteriosclerotic heart disease, the metabolic disturbances accompanying surgical procedures add to the difficulties, because excessive insulin may lead to anginal pain or even myocardial infarction.

The choice of the anesthetic agent in cardiac patients requires careful deliberation. Ether is still the most widely used general anesthetic and is probably the most reliable for cardiac patients if high oxygen concentrations are maintained along with the ether. This latter qualification deserves emphasis, because the too widespread habit of slapping a gauze mask on the patient's face and pouring ether thereon may lead to anoxia, with resultant secretion of adrenalin and increase in heart rate and blood pressure. If open-drop ether has to be used, it is a simple procedure to run a tube under the gauze mask from an oxygen tank and let oxygen run in at a rate of about 4 liters per minute, remembering, of course, the enhanced inflammability and explosiveness of ether when mixed with oxygen. Ether may cause arrhythmias, but they are usually of minor nature and due to extrasystoles. The major disadvantages of ether are the nausea and vomiting which usually follow its use as an anesthetic, and the violent muscular efforts of emesis may be harmful to the cardiac patient. Also, the excitement stage during the induction of ether anesthetics may lead to acute increases in the blood pressure.

Chloroform is mentioned only to be condemned. It has no place in anesthesia for cardiac patients, since it is a vasomotor and myocardial depressant, and may precipitate ventricular fibrillation.

Cyclopropane is a pleasant, rapidly acting anesthetic agent, with a high margin of safety, and permits the use of high oxygen concentrations. Its major disadvantage is that it increases myocardial irritability and may cause ventricular extrasystoles or tachycardia. Preanesthetic medication with quinidine may be advisable in patients with cardiac disease who are particularly subject to arrhythmias (e.g., patients with thyrotoxic heart disease). The addition of a small amount of ether to the cyclopropane mixture may also help in minimizing arrhythmias.

Nitrous oxide is a poor anesthetic for use in cardiac patients because partial asphyxia is a necessary component for complete relaxation; how-

ever, it may be useful as a supplementary agent, for example with intravenous pentothal.

Ethylene has but little effect on the cardiovascular and respiratory systems and is pleasant for induction and recovery. However, preanesthetic medication is essential for proper ethylene anesthesia, and the precautions we have mentioned incident to such medication must be observed. In addition, the percentage of oxygen in ethylene-oxygen mixtures for anesthesia is sometimes insufficient for cardiac patients. Ethylene may be used satisfactorily as a supplementary agent in cyclopropane-oxygen mixtures.

Avertin is used for basal narcosis quite frequently in some areas. In addition to the disadvantages inherent in nonvolatility, avertin has a depressant effect on respiration and a marked hypotensive effect.

Intravenous pentothal anesthesia has little effect on the cardiovascular system when properly used. Respiratory depression is not uncommon, however, and the disadvantages of nonvolatility are present here too. Hepatic and renal function should be adequate to insure proper breakdown and excretion of the agent. Small doses of intravenous pentothal may be used advantageously to produce superficial anesthesia prior to administration of inhalant agents.

Spinal anesthesia is an excellent method for cardiac patients, with the possible exception of hypertensive persons. Significant drops in blood pressure can be prevented by the use of ephedrine or paredrine. Of course, the usual precautions have to be observed to prevent respiratory difficulties resulting from diaphragmatic or intercostal paralysis.

Local anesthesia when it can be used would seem ideal, but there seems to be little difference in mortality between local and general anesthesia in cardiac patients.<sup>5</sup>

Thus it is apparent that there is no one ideal agent for anesthesia in cardiac patients. The addition of curare to the anesthetists's armamentarium has permitted muscular relaxation without excessively deep anesthesia. A combination such as nitrous oxide-oxygen by inhalation with intravenous pentothal sodium and curare permits satisfactory anesthesia with adequate oxygen and reduces the amount of pentothal necessary.

The maintenance of fluid and electrolyte balance in cardiac patients postoperatively often poses

delicate problems. Every patient must be dealt with on an individual basis, and general rules can be discussed only vaguely. Too often, patients who are really in need of blood or plasma are given infusions of glucose in saline. Certainly in a patient who is able to take fluids by mouth, intravenous administration is rarely necessary.

Patients with borderline cardiac reserve may be pushed into pulmonary edema or congestive failure by excessive fluid administration postoperatively. Intravenous fluids should not be administered at a rate more rapid than 10 c.c. per minute, since it was found that in patients with impaired hearts the speed at which fluids are given intravenously is the most important factor in the patient's tolerance of the fluids.<sup>10</sup> Our main objective in administering fluids is to maintain the urinary output and to permit vaporization without dehydration, and for these purposes the best fluid to administer is 5 or 10 per cent dextrose in distilled water.<sup>6</sup>

Patients with normal hearts may develop subcutaneous and/or pulmonary edema when given excessive salt postoperatively, and in past decades we have become cognizant of the major role played by sodium retention in the pathogenesis of the features of congestive failure; therefore, we must be exceedingly cautious in the use of saline infusions in cardiac patients. In addition to the hazards of excessive salt, intravenous fluids increase the venous pressure and dilute the plasma proteins, factors which are also conducive to the development of edema.

Certainly, patients who have pulmonary or subcutaneous edema on a cardiac basis may be presumed to have sufficient salt reserves to handle the usual postoperative losses without the necessity for replenishment by intravenous saline. In cardiac patients who have no excessive fluid or salt accumulations, the depletion of salt via sweat, vomitus, diarrhea, drainage tubes or intestinal suction may require active replacement, or the patients may develop weakness, somnolence, muscle cramps and dehydration. In such cases, the best guide to the need for saline is the clinical condition of the patient.

In the prevention of postoperative pulmonary complications, the usual measures to insure adequate pulmonary aeration must be carefully observed. Frequent changes in position, oxygen inhalations, minimal use of restrictive bindings, avoidance of excessive narcosis, bronchial drainage

where necessary and antibiotics may be indicated.

Thrombophlebitic complications should be prevented by frequent massage of the legs, prophylactic venous ligation where necessary, and the use of anticoagulants when contraindications do not exist.

Butler, Feeney, and Levine<sup>5</sup> reported a series of 414 patients suffering from heart disease who had 494 operations, with but twenty-eight "unexpected" deaths, a mortality of 6.3 per cent. Brumm and Willis<sup>3</sup> found a 4.3 per cent mortality from cardiac causes in their group of 257 patients with severe coronary artery disease who were subjected to necessary surgical procedures. Therefore, it is evident that with proper teamwork among the medical attendants, the over-all risk of surgical procedures in cardiac patients is not alarming.

### Summary

1. The factors involved in evaluating the cardiac patient as a surgical or obstetrical risk have been reviewed briefly.
2. The most important element is the degree of impairment of the patient's cardiac reserve, a factor which is best determined from the history.
3. Elasticity in modifying the usual hospital routines and proper medical teamwork are essential to the successful management of the cardiac patient.

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MSMS



# Rhinoplasty and Nasal Respiration

By Edward J. Levitt, M.D.

Detroit, Michigan



IN THE PAST, rhinoplasty was performed essentially for cosmetic reasons. It has become apparent, however, that the surgeon should not only strive to improve the appearance of the patient, but if internal nasal derangements are present, they should be removed in order to improve nasal physiology and respiration. This is particularly important where septal deflections are found to interfere with breathing.

The indications for rhinoplasty may be classified into (1) physiologic indications, and (2) psychologic indications. Under the former we treat (1) congenitally malformed noses, and (2) malformations due to trauma or disease. The psychologic indications are intimately a part of the restoration of the patient's ego by eradicating the stigma which may have caused the patient tremendous self-depreciation.

## False Concepts of Submucous Resection

It has been taught in the past that the septum serves as a means of support, and with its complete removal, either the tip of the nose may drop or saddle nose result, or both. Many surgeons have had such a disheartening experience. For this reason they thought it important to leave, during submucous resection, an anterior buttress of cartilage for support. It has been the belief, heretofore, that when this buttress was left, neither did dropping of the tip result nor did "saddle nose" occur. Patients so operated upon, however, have not enjoyed normal breathing after the surgical intervention. The buttress that remained as a support continued to act as a mechanical obstruction to breathing. The straightening of the deviation posterior to this buttress did not always relieve the symptoms nor accomplish the required end result.

Newer concepts of this subject teach that when the septal deviation is limited to the anterior

buttress of cartilage, the classical submucous resection is of little value in relieving the difficulty in breathing. The patient does not breathe well after this operation because that support which had been untouched surgically still constitutes the obstruction to breathing, and thus respiration remains permanently impaired.

The "saddle nose" which occasionally follows the submucous resection is due to the resultant pull from fibrosis and contraction of tissue four to six weeks after the operation, rather than from



Fig. 1. Routine rhinoplasty performed for hump and hooked nose. (Left) Before operation. (Right) Three months after operation.

the loss of support due to the removal of the cartilage itself. If the saddle nose were due to removal of the cartilage *per se*, then the deformity should arise immediately at the time of surgical removal. The deformity arises from the subsequent contraction and healing.

## Submucous Resection by Rhinoplastic Methods

In preparing the patient for operation, the initial topical application on the nasal mucosa with equal parts of 10 per cent cocaine and adrenalin is followed by nerve block anesthesia



Fig. 2. (Left) Patient had a prominent hump nose with an extreme frustration complex resulting from the deformity. Routine rhinoplasty was performed, with removal of an exceptionally large hump. (Right) Three months after operation. Patient showed an improved mental outlook and relief from the marked inferiority complex and attendant frustration.



Fig. 3. (Left) Patient had an old nasal fracture with a resultant saddle nose. Routine rhinoplasty was performed, including hump removal, narrowing and shortening of the nose. A hump removed from a patient operated upon one hour previously was inserted to fill in the defect. Patient made an uneventful recovery, and a tremendous improvement in appearance resulted. Penicillin therapy was used for three days. (Right) Three months after operation.

involving infratrochlear, infraorbital, nasopalatine and anterior palatine nerves. The incision is made with a Bard-Parker No. 11 along the edge of the septum where the cartilagenous and membranous septum unite. First, a small piece of cartilage and mucosa are removed as a small sliver of tissue, in order to obtain better visualization. Mucopericondrium is separated on both sides so that the obstruction between the flaps may be removed. Oftentimes the quadrangular

cartilage, the vomerian ridge and the perpendicular plate of the ethmoid are removed. The septal cartilage taken out must be in one piece and intact. This portion is reinserted between the mucosal flaps. It is our feeling that this reinsertion of a straight piece of cartilage prevents the ultimate fibrosis and contraction and is the main reason that saddle nose does not occur in this particular procedure.

A bed is made in the columella for the insertion





Fig. 4. Routine rhinoplasty performed for prominent nose with hump. (Left) Before operation. (Right) Three months after operation.



Fig. 5. (Left) Patient had an old nasal fracture. The hump was removed, the nasal vault narrowed and the nose shortened. (Right) Three months after operation.

of the cartilage with a Stevens scissors. This bed extends from the nasal tip to the nasal spine. All existing fibrous bands must be cut through. Two double-arm silk sutures are then passed through the end of the graft that fits in the columella. The graft is then drawn through the columellar bed and lies between the two flaps of mucosa. The two needles on the posterior suture are passed through the incision into the posterior part of the columellar bed and are passed through the columella and brought out of the nose on its under sur-

face near the septolabial angle. The needles on the anterior suture are passed through the columella near the tip of the nose. The graft now lies between the septal flaps, and the two sutures are used to pull the graft into the columella bed and hold it in place until the fixation sutures are placed. The guide sutures are then cut, and the graft is in its proper place. Vaseline gauze packs are firmly placed against the sides of the septum holding the graft in place (Fomon).

It is by this method of rhinoplastic submucous



Fig. 6. (Left) Patient had an old nasal fracture with a hump and a retracted columella. Rhinoplasty was performed, with hump removal, shortening and narrowing of the nose. A baton of cartilage was inserted in the columella for added support. (Right) Three months after operation. There was marked improvement in nasal respiration.



Fig. 7. Routine rhinoplasty with removal of hump and correction of hanging columella. (Left) Before operation. (Right) After operation.

resection that anterior obstructions may be removed and adequate nasal breathing ensue. The reinsertion of a piece of cartilage insures the patient against a subsequent saddle nose.

#### Importance of Nasal Physiology in Rhinoplasty

At this point a brief review of the newer concepts of nasal physiology and respiration is in order.

It has become more and more evident to the

rhinologist that deformities of the upper and lower lateral cartilages, especially if associated with deviations of the nasal septum, result in marked nasal obstruction and in poor physiologic breathing. It is therefore easy to understand why in the past ten years the otolaryngologist has accepted as his responsibility the correction of both external and internal nasal deformities which heretofore were uncorrected by cosmetic surgery alone. A nose which looks good but through which the patient





Fig. 8. Routine rhinoplasty with removal of an exceptionally large hump. (Left) Before operation. (Right) After operation. Patient showed an improved mental outlook and relief from a marked inferiority complex and the attendant frustration.

cannot breathe normally is of little comfort to the individual.

Air currents travel in a definite direction on inspiration through the nares between the middle turbinates and septum and then downward through the choanae; on expiration they take the same course but in the opposite direction. Any interference with these air currents inevitably results in symptoms of nasal obstruction. Certainly a deformity either in the cartilaginous vault or the nasal bones will then contribute to interference in the passage of air into or out of the nose. For

example, a too-dependent nasal tip will shunt the air currents to the dorsum of the nose creating eddies at this point. A too-elevated tip will direct the currents of air along the floor of the nose to the choanae.

Still another factor to be considered is the variation in pressure that normally exists in the nose during inspiration and expiration. This varies from minus 6 cm. of water during inspiration to plus 6 cm. of water during expiration. Any abnormality, therefore, in the shape or form of the nares or upper lateral cartilages prevents normal nasal respiration from taking place. Under proper physiological conditions the nares are smaller than the choanae. This aids in building up the negative pressure on inspiration. On expiration the air passing through the choanae meets a resistance as it flows through the narrower nares and so helps maintain a positive pressure. Too wide nares, therefore, results in a drop in the negative as well as the positive pressures. Nares that are too narrow may increase the negative pressure to a point where collapsed alae may result.

### Conclusions

1. Any deviation from the normal, both with respect to the maintenance of pressures or time allowed for the mixing of the respiratory gases results in poor physiologic breathing.

2. From the above review of a phase of the physiology of nasal respiration it follows that rhinoplastic procedures correcting dependent or elevated tips, narrow or wide nares, twisted septa and correlated external deformities, including nasal humps, all tend to restore the physiologic functions of the nose. At the same time the operation removes any psychic disturbance which may have resulted from these deformities.

3. Cosmetic correction of external nasal deformities alone does not result in normal nasal respiration.

4. Examples of rhinoplastic procedures are given in which there is correction of both extranasal deformities and intranasal pathology.

5. Rhinoplasty has today become an integral part of the practice of otolaryngology.

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# Tennis Elbow

By Leland L. Swenson, M.D.

Muskegon, Michigan



**"TENNIS ELBOW"** or epicondylitis of the humerus is characterized by pain over the external epicondyle on grasping and pronating, particularly with the elbow in extension.

The condition is seen more commonly in males than females, with the age incidence

highest in the third and fourth decades.

The right elbow is affected more often than the left. Occupations characteristically have much to do with the development of the affliction. Repeated maneuvers in which the extensor conjoined tendon is put on a stretch, by grasping and pronating against resistance in the extended position, initiate symptoms, e.g., in pipe fitters, leather workers, press operators, painters, carpenters, surgeons, and athletes. Pulling on a heavy wrench or screwing on bone plates may produce the condition. Volleyball players and meat-carvers have been seen with involvement of the common flexor tendon of origin arising from the medial epicondyle. Medial epicondylitis (in the author's experience) occurs about 10 per cent as often as lateral epicondylitis.

## Anatomy

The extensor carpi radialis brevis arises from the lateral epicondyle of the humerus by a tendon common to it and the extensor digitorum communis, extensor digiti quinti proprius, and extensor carpi ulnaris. Beneath and posterior to it is the supinator, which has a tendinous origin from the posterior part of the lateral epicondyle and overlies the radiohumeral joint. The radial collateral ligament lies deep to the supinator and is intimately blended with its tendon of origin. A radiohumeral bursa is found in less than 10 per cent of dissected cadavers. When present, it lies deep to the conjoined tendon, but extends to the joint capsule directly over the radiohumeral joint.

The pronator teres, flexor carpi radialis, palmaris longus, flexor carpi ulnaris, and flexor digi-

TABLE I.

Sex Incidence:	Males	Females
Cases	53 (84%)	10 (16%)
Age Incidence:	Age	Cases
	20-30	6
	30-40	18
	40-50	29
	50-60	8
	60-70	2
		Total: 63 cases
Elbow Involved:	Right	Left
Cases	45 (71%)	18 (29%)

tum sublimis, comprising the superficial group of flexor muscles, take origin from the medial epicondyle of the humerus by a common tendon similar to the common extensor tendon.

## Pathology

No known finding to date will explain the symptoms, completely. (1) It is postulated, however, that in the majority of instances, those individuals having tenderness over the epicondyle have an incomplete tear in the fibers of the conjoined tendon. This has not been confirmed by either gross or microscopic findings. (2) A second group of extra-articular cases presents roentgen findings. Kohler described spur formation extending distally from the lateral epicondyle. This or a localized periosteal reaction is occasionally seen if routine x-rays are taken. (3) A third group is the condition of radiohumeral bursitis, which in the inflamed state has been described by Hunt and Stack as a small pea-sized mass of granular and areolar tissue plus fat, lying deep to the conjoined tendon. (4) A fourth group, also described by Hunt and Stack, is made up of intra-articular lesions consisting of inflamed synovial membrane, frayed or detached portions of the orbicular ligament, or even roughening of the articular margin of the semilunar fossa or radial notch.\*

## Symptomatology

In the majority of cases, patients complain of pain over the epicondyle (Groups 1 and 2) on grasping and pronating. This is most marked with the elbow extended. Most will claim that they were injured by striking the elbow against an obstruction; however, they are unable to exhibit or recall definite discoloration or abrasion of the skin. Ten per cent of the patients in our experience complained of pain on supination as well as on pronation. Five per cent complained of numbness extending to all the fingers. Weak-

\*A similar condition is occasionally seen involving the insertion of the triceps brachii and the quadriceps femoris muscles.



ness of grip is usually seen in the more severe cases and may become so marked that the patient is unable to grasp a tumbler. The condition may come on acutely within a day or two, but more frequently, it begins insidiously, gradually increasing in severity.

TABLE II. DURATION OF SYMPTOMS PRIOR TO DIAGNOSIS

Time	Cases
1-7 days	10
1-2 weeks	19
2-4 weeks	15
1-2 months	15
Over 3 months	4
Average: 3½ weeks	Total: 63

On examination, complaint of tenderness is elicited in a sharply localized area over the anterior aspect of the epicondyle in the first two groups, just distal to it or over the radiohumeral joint in the third group, and over the head of the radius in the intra-articular lesions. (In medial epicondylitis, the tenderness is localized to the medial epicondyle.) These patients characteristically have free range of motion. No discoloration or other evidence of contusion or abrasion is evident. Swelling is rarely present except in intra-articular involvement, where it is not an outstanding feature.

### Treatment

Treatment depends on the severity of the condition. In mild or early acute cases, the patients are instructed in the use of heat on the elbow followed by gentle massage. A sling may be worn; however, it has been our practice to instruct these patients to work with their elbows close to their bodies, not to reach and grasp or do any motion which causes pain. Some writers advocate plaster immobilization, e.g., the use of a cock-splint (Watson-Jones), or splinting the forearm in neutral with the elbow at ninety degrees (Stack and Hunt).

In the more chronic and severe cases, manipulation under local anesthesia may be employed. The diagnosis can be confirmed by complete temporary relief of symptoms on thorough injection of a 1 or 2 per cent solution of novocaine into the origin of the conjoined tendon. Mills advocated extending the elbow fully while the forearm is pronated and the wrist and fingers flexed. Sir Watson-Jones advocates a procedure used successfully by English bonesetters: "The elbow is

held fully extended with one hand over the outer side of the lower forearm, the other hand over the inner side of the joint. The joint is sharply adducted in such a way as to open it on the outer side, first with the forearm supinated, then in the mid-position, and finally with the forearm pronated. Clicks or snaps may or may not be elicited. Active exercises are immediately initiated and if necessary, the manipulations are repeated without anesthesia every fourth day until relief is complete." Cyriax has described a similar maneuver. The patients under our care have been advised to work with the elbow close to their sides until the condition is relieved.

TABLE III. END RESULT STUDY OF TREATMENT

Treatment	Successful			Unsuccessful	
	Cases	Per Cent	Average Time in Weeks	Cases	Per Cent
1. Heat, massage, working with elbows close to sides	20	90.9	3.0	2	9.1
2. Manipulation (novocaine anesthesia)	31	77.5	3.4	9	22.5
3. Roentgen therapy	2	50.0	3.5	2	50.0
4. Surgical	9	100.0	4.3	0	00.0

No correlation was found between duration of symptoms and time necessary for relief of the condition.

Roentgen therapy consists of 1200 r, measured in air, in divided doses over two to three weeks.

Surgical treatment is performed under local anesthesia. A one and one-half inch oblique incision is made over the lateral humeral epicondyle. The conjoined tendon of the extensor muscles is identified and incised widely at its origin from the lateral epicondyle. A bursa is looked for. (Dwyer and Murray advocate extensive periosteal stripping over the epicondyle.) Mouchet advocates removal of paraepicondylar osseous proliferations. Travernier suggests sectioning of the nerve supply to the radio-humeral joint area. Allen and Stack and Hunt open the joint capsule, carry the forearm through a complete range of movement to visualize any thickened redundant synovial membrane or detached orbicular ligament, and remove the offending tissue.

All patients studied in this series who had no permanent relief following conservative treatment by the first two methods received relief either by roentgen therapy or by incision. Only one patient refused further treatment than manipulation—his

(Continued on Page 1004)

# Venous Thrombosis and Pulmonary Embolism

## *Prophylaxis, Diagnosis and Treatment*

By Robert R. Linton, M.D.

Boston, Massachusetts



R.R. LINTON, M.D.

**D**URING THE past decade a great deal of attention has been focused on the problem of venous thrombosis and pulmonary embolism. Both the internist and the surgeon have come to realize the direct relationship between these two conditions. With the reduction in the mortality rate from

serious infections and major surgical procedures, the importance of preventing death from massive pulmonary embolism has become more obvious, especially since it is now realized that the problem is not an insurmountable one. Instead of the attitude of the majority of the medical profession in the past that there is little that can be done to prevent fatal embolism, considerable advance has been made in recent years regarding the etiology, prophylaxis, diagnosis, and therapy of thromboembolic disease. However, much is yet to be learned, since, unfortunately, deaths still occur; in fact, according to pathologists' statistics, the incidence of fatal pulmonary embolism in the autopsy room is still about as high as it was ten years ago.<sup>20</sup> The direct relationship between deep venous thrombosis of the lower extremities and pulmonary embolism is well recognized. Most authorities agree that 95 to 98 per cent of pulmonary emboli arise in the deep veins of the legs. The recent opinion expressed by Cummine and Lyons,<sup>8</sup> that many instances of pulmonary infarction arise due to primary thrombosis in the pulmonary veins, has not, as yet, been proved.

The terminology of deep venous thrombosis is somewhat confused in the literature. Ochsner and De Bakey<sup>18</sup> have popularized the term, "phlebothrombosis," for that type which does not produce any inflammatory condition in the ex-

tremitry and from which most instances of fatal embolism arise. Homans<sup>12</sup> has termed this type "bland venous thrombosis." Another appropriate term, which the author has suggested, is "silent venous thrombosis." Whether there is much difference between this type and the usual so-called "thrombophlebitis," where there is marked evidence of local inflammation in the extremity along the deep venous system, is still somewhat undetermined. It is our opinion, however, that there probably is relatively little difference except in the age of the process. There is no question that in the silent type of thrombosis or so-called "phlebothrombosis" embolism is much more apt to occur than in the patient with the inflammatory thrombophlebitis, as pointed out by Ochsner and De Bakey<sup>18</sup> and Homans,<sup>12</sup> since in the former the thrombus is very loosely attached and may be readily dislodged to produce embolism, whereas in the latter it is intimately adherent to the vein wall and is less likely to result in embolism. The therapy, in our opinion, should be the same irrespective of the type, since massive embolism may occur even in the so-called "obstructing" type of thrombophlebitis.

There are a number of factors which explain the apparent increase in thromboembolic disease and, therefore, the lack of improvement in the statistics of fatal embolism as seen in the autopsy room in any large clinic. It has been clearly demonstrated that most pulmonary emboli, both lethal and non-lethal, occur in patients over forty years of age. In a survey of medical patients by Carlotti et al,<sup>6</sup> 83 per cent were over forty years of age, and in a group of surgical patients reported by Allen et al,<sup>2</sup> 81 per cent were over forty years of age. Due to the fact that there has been an increase in the life span of man during the past decade or two, more patients in the older age group are being admitted to the hospital, especially for operations on malignant disease, so that the incidence of thromboembolism has risen. These operations also, in many cases, are of greater magnitude than a decade or two ago. At the Massachusetts General Hospital the mean age of patients admitted to the surgical wards has increased from thirty-six years in 1930 to forty-four years in 1945. In addition, fewer patients are dying as a result of surgical shock, and it is now rare to have a patient succumb to a serious infection such as peritonitis or pneumonia, so that the critically

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From the Department of Surgery, Massachusetts General Hospital, Boston, Mass.



ill patients are living longer following surgical procedures and therefore are more prone to thromboembolic disease.

### Diagnosis

Despite all the literature that has been written concerning this subject during the past decade, many physicians and surgeons fail to recognize the early signs of the disease and, as a result, wait until a full-blown femoriliac thrombophlebitis or so-called "phlegmasia alba dolens" has developed before instituting therapy. In other cases massive embolism may occur when the early signs of phlebitis may have been present but not recognized. The ideal that everyone is working for, of course, is the prevention of venous thrombosis in all patients. Since it seems unlikely that this Utopian state will ever be fulfilled, because in many instances the disease begins spontaneously without evident cause, it therefore seems important to stress the early signs and symptoms of deep venous thrombosis of the lower extremities. This seems especially indicated since minor pulmonary embolism may occur in about one patient in twenty-five with deep venous thrombosis of the lower extremities, according to a series of patients reported by Welch and Faxon;<sup>22</sup> one out of four of these died from massive embolism, a mortality rate in this group of 25 per cent.

One of the most important and useful methods of detecting early venous thrombosis of the lower extremities is the early examination of both legs for swelling and tenderness. This simple fact seems hardly worth mentioning, but it is surprising how few physicians and surgeons pay any attention to the legs during a long illness or in the postoperative period following a surgical procedure. This is because the most common signs of early deep venous thrombosis of the lower extremities are swelling of the lower leg and tenderness to palpation over the deep veins of the calf. An analysis of over 500 cases at the Massachusetts General Hospital reveals that these two signs were present in about 65 per cent of the cases. Discomfort in the calf or popliteal region, on forceful dorsiflexion of the foot, the so-called "Homans' sign," was present in 41 per cent. Distention of the superficial veins over the lower leg and foot, as compared to the normal extremity, is another useful sign although less frequently present. A concomitant rise in temperature, pulse

and respiration, in a patient with a preceding normal chart, when no other cause can be found, is frequently evidence of a small pulmonary embolus and an early phlebitis. One of the most important signs in our experience, even though local evidence of thrombosis in either extremity cannot be determined, is the occurrence of a non-fatal pulmonary embolus. In the above series it was found to be present in 35 per cent of the patients. Since, according to our statistics, fatal pulmonary embolism is more likely to occur following a warning non-lethal embolus, the diagnosis of minor embolism is extremely important so that measures can be taken to prevent death from massive embolism.

The sudden development of a severe pleuritic type of pain, especially if it is followed by hemoptysis, is almost pathognomonic of pulmonary infarction and deep venous thrombosis of the lower extremities. Roentgenographic examination of the chest in suspicious cases is an important aid in diagnosis. A roentgenogram taken at the bedside with a portable x-ray machine is practically useless for diagnostic purposes. It is recommended, therefore, if a roentgenogram is to be taken it should be done with the standard equipment in the x-ray department. Both anteroposterior and lateral views should be taken routinely, the latter to visualize better the lower lobes.<sup>10</sup> If possible, it is also advisable to fluoroscope the chest, as a small infarct may be detected by this method that otherwise would be missed on the film. It is also worth pointing out that the majority of pulmonary emboli lodge in the lower lobes. An analysis by Allen et al<sup>2</sup> revealed that in a series of 111 cases 97 per cent lodged in the right and left lower lobes, so that these locations should be especially examined. Phlebography of the deep veins of the lower extremities has been given up as a routine procedure in our clinic because the interpretation is often equivocal, especially in the early diagnosis when it would be most valuable. In addition, one of our patients with bilateral negative phlebograms succumbed forty-eight hours after they were done from a massive pulmonary embolus arising from the deep veins of one of the lower extremities.

### Prophylaxis

Thromboembolic disease cannot be prevented in all patients. Even in the postoperative group it

occurs despite utilization of all the modern methods now available. It develops most frequently in postoperative patients following major abdominal operation, especially for malignancy; other conditions in which it often appears are trauma and fractures of the lower extremity, severe infection such as pneumonia and typhoid fever, pregnancy, and severe cardiac disease. In addition, as already stated, Allen et al,<sup>2</sup> writing in reference to surgical patients, and Carlotti et al,<sup>6</sup> referring to medical patients, have pointed out that in each group over 80 per cent of thromboembolic disease occurs in patients beyond forty years of age. In view of these facts, prophylactic measures are especially indicated in patients presenting the above conditions who are over forty years of age.

Certain general measures are indicated to encourage the venous return of blood from the lower extremities in order to prevent it from stagnation which seems to favor thrombosis. Passive and active bicycle exercises for bed patients when possible are of definite benefit. In addition, it is recommended that the head of the bed should be elevated on blocks under the bedposts so that the patient is lying on a slight incline with the head and chest above the level of the legs, similar to the position recommended by Frykholm.<sup>11</sup> A board is placed at the foot of the bed so that the patient can push against it with his feet as he or she tends to slide down in the bed. This automatically results in exercise and contraction of the calf muscles, thus favoring the emptying of the veins where thrombosis most commonly originates. It is believed this position is better than the Trendelenburg, which is most commonly recommended because it actively stimulates the venous circulation. Anything which puts pressure on the popliteal space, such as raising the lower part of the bed under the knees or placing pillows in this region, should be avoided, especially in patients confined to bed for long periods.

Other measures, such as the proper fluid and electrolyte balance, are well enough understood so that they only need mentioning. Special attention, however, should be directed against allowing abdominal distention to persist since it increases intra-abdominal pressure and so interferes with venous return from the legs. Tight abdominal binders should never be used for the same reason. Early ambulation, even after major abdom-

inal operations, is an important prophylactic measure. This means that the patient should be gotten out of bed on the first or second postoperative day and made to walk about the room, and not allowed to sit in a chair for at least a week, because the sitting position favors venous stagnation and thrombosis. Abdominal incisions should be made and sutured so that the patient may get out of bed within one or two days after an operation without danger of wound disruption.

The anticoagulants, heparin and dicumarol, are of chief value in the prophylaxis of venous thrombosis rather than in the actual therapy of it, in our opinion at the present time. The former has not proved to be of so much value in our clinic as the latter, chiefly because of the difficulty of administration, despite its advantage of rapid action. The Swedish surgeons, Bauer,<sup>4</sup> Crafoord<sup>7</sup> and Zilliacus,<sup>23</sup> however, have apparently used it with considerable success, and in this country Murray and Best<sup>17</sup> and Loewe et al<sup>15</sup> have recommended its use. Since the introduction of dicumarol, however, this drug has come more and more into favor because of its relative cheapness and the fact that it can be administered by mouth. The chief drawbacks to its use are that after administering it there is a forty-eight-hour delay before it produces an effect on the coagulability of the blood, and not all patients respond alike to the same dosage. Furthermore, laboratory facilities and a technician for performing prothrombin measurements are absolutely essential to guard against an overdosage. Dicumarol has been used in our clinic in 647 surgical patients between the ages of forty and sixty-five years of age, up to June 1, 1948.<sup>1</sup> The average dose used in these patients was 200 milligrams, and the drug was administered within forty-eight hours of the operative procedure. Occasionally a larger dose was used, and in some patients resistant to the drug multiple doses were necessary to obtain the desired effect. The percentage of thrombosis in the group of patients treated in this manner was reduced by 80 per cent in comparing them with a similar group that did not receive the drug. A bleeding tendency developed in a few, and two patients died as the result of hemorrhage, one from bleeding following a prostatectomy, a patient who probably should not have received a drug, and another from a cerebral hemorrhage, the latter occurring fourteen hours after the dicumarol was administered so it



may not have been the cause. Twelve patients developed phlebitis and fourteen others pulmonary infarcts while receiving it. These were treated by bilateral femoral vein interruption. No fatalities from massive pulmonary embolism occurred in the group of 647 patients who received this combined form of prophylactic therapy.

It has been our opinion that the aged patient is more subject to the hemorrhagic complications following the anticoagulant therapy, so that in those patients over sixty-five years of age subjected to major surgical procedures another form of prophylaxis has been carried out. This procedure consists in prophylactic interruption of the superficial femoral veins. It was not performed until many hundreds of femoral veins had been interrupted in patients with established deep thrombosis and we had satisfied ourselves that the extremities would not be permanently damaged by such a procedure. The rationale of it is to interrupt the long venous channel from which the vast majority of fatal pulmonary emboli arise. It is performed preferably at the same time as the major operative procedure or within a few days thereafter. The level of interruption has been the superficial femoral vein just distal to the deep femoral vein. It is difficult to state how many lives may have been saved by this method, but in two comparable series of 871 patients each, one with and the other without the benefit of this procedure, there were only four deaths from fatal embolism in the former, whereas there were thirty-seven deaths in the latter. These figures certainly speak for themselves and the advisability of this form of prophylaxis. Since instituting this method of treatment, it is only fair to state that 950 patients have been subjected to it at the Massachusetts General Hospital up to June 1, 1948. In this group there were four deaths from massive embolism. The thrombus in two of these patients arose from the iliac veins at a higher level than the point of interruption. It is obvious from these statistics we do not at the present time have a method of prophylaxis which will protect every patient from thromboembolism and the danger of death either from hemorrhage or pulmonary embolism.

Mahoney and Rise<sup>16</sup> have recommended prothrombin time determinations of every patient, thereby being able to select for treatment those patients whose prothrombin time becomes notably reduced during the first postoperative week. A

somewhat similar procedure has been recommended by Cummine and Lyons.<sup>8</sup> They recommend a postoperative coagulation graph and estimations of the plasma fibrinogen B, to determine what they term as the "pre-thrombotic state." They recommend, if it is found, treatment with heparin and/or dicumarol in positive cases. The results do not appear to be outstanding, since they report forty-eight cases of leg thromboses and forty-one of pulmonary thromboses treated with anticoagulants. Two deaths occurred in the pulmonary thrombosis group, and in both thrombosis of the legs was present. It seems obvious, however, that further investigations along these lines should be carried out.

### Treatment

The conservative treatment of a well-established case of deep venous thrombosis, with rest in bed, elevation of the extremity, and the application of hot and cold packs, should no longer be acceptable except in the unusual case because it does not protect the patient from fatal pulmonary embolism. Injection of the lumbar ganglia with procaine solution frequently gives symptomatic relief, as recommended by Oschner and De Bakey,<sup>19</sup> and it seems to shorten the period of hospitalization but does not eliminate the danger of pulmonary embolism. The anticoagulants, heparin and dicumarol, have also been used, but in our hands not infrequently after they have been discontinued both minor and fatal pulmonary emboli have occurred. The statistics of Cummine and Lyon<sup>8</sup> and Borgstrom<sup>5</sup> recently published would also tend to bear this fact out, since the former reported two deaths from massive pulmonary embolism in eighty-nine patients with thrombosis and the latter reported seven deaths from the same cause in patients who received heparin and dicumarol therapy after thromboembolism developed.

The more radical treatment by means of bilateral femoral vein interruption, with or without thrombectomy, depending on whether a thrombus is present in the femoral vein, as performed in our clinic, has been found to greatly shorten the course of the disease and in most cases has prevented fatal embolism. This method was first described by Homans<sup>13</sup> in 1934. The first case in our hospital was treated by this method in 1937. Since then, we have interrupted one or both femoral veins in 1,332 patients up to June 1, 1948,

as a therapeutic method of treatment of deep venous thrombosis and pulmonary embolism. The chief indications for this method of therapy are: (1) the occurrence of a non-fatal pulmonary embolus in a patient whether or not there are signs of venous thrombosis in the legs; (2) the development of venous thrombosis in the deep veins of the lower extremity, as evidenced by tenderness, pain, swelling, dilated superficial veins, or discomfort in the calf or popliteal space when the foot is passively dorsiflexed; (3) a concomitant rise in temperature, pulse and respiration in a postoperative or medical patient who has had a previously normal chart and in whom the elevation cannot be explained by some other cause; (4) if venous thrombosis is diagnosed in one extremity, the femoral vein of the other leg should be interrupted in all cases even though no signs of venous thrombosis in it are detected.

The technique of the surgical procedure has been described previously as it is performed in our clinic.<sup>3,14</sup> It should be pointed out that in the hands of a surgeon accustomed to large blood vessel surgery it is a simple procedure, but for the average surgeon it may be fraught with considerable danger, due to the fact that severe bleeding may be encountered from injuring the femoral vein, and as a result the femoral artery may be irreparably damaged with resulting loss of the limb. For this reason, it is of utmost importance that a surgeon who contemplates utilizing this method should familiarize himself very thoroughly with the anatomy of Scarpa's triangle. Another practical point is the fact that if a thrombus is present in the common femoral vein it is advisable to interrupt this vessel rather than the superficial femoral vein since a thrombus may reform, and if the interruption is not proximal to the profunda femoris, a fatal embolus may arise from this vessel. It is important, however, that the interruption, especially in the aged patient, should not be proximal to the saphenofemoral junction, since in a few patients the saphenous vein may be the only collateral channel through which blood can return from the leg and serious consequences may result, as reported by Dennis.<sup>9</sup>

From practical experience it has also been found that it is impossible to do a thrombectomy satisfactorily in the patient who has had a phlegmasia alba dolens, with swelling up to the groin that has persisted for over forty-eight hours. This is because the thrombus becomes so adherent to the

intima of the vein that it cannot be removed. Interruption of the venous system at a higher level, such as the inferior vena cava, may be necessary in certain cases. This has been done in thirteen instances in our clinic, indicating that we use it only in the rare and unusual case. It is our opinion it should be reserved for those patients who have septic pulmonary emboli arising from a septic process in the pelvis or in an unusual case of thromboembolic disease in which there is a femoroiliac thrombosis of several days' duration with pulmonary embolism. Inferior vena cava interruption is preferable to bilateral common iliac vein interruption, because the venous systems from both extremities may be interrupted through a single exposure. The extraperitoneal approach is recommended. A number of incisions can be used to expose this large blood vessel, but a right paramedian incision, retracting the rectus muscle lateralward, and the ureter, peritoneum and its contents medialward from the iliac fossa, is recommended.<sup>14</sup> Interruption of the inferior vena cava has always been carried out in continuity, since it is difficult to mobilize sufficient of this large vessel to ligate and divide it safely. It is a major surgical procedure, requiring general or spinal anesthesia in contradistinction to femoral vein interruption which is done under local anesthesia as a rule. It is our opinion that it should not be used routinely for the treatment of thromboembolic disease since it may carry a relatively high mortality, as shown by the figures reported by Thebaut and Ward.<sup>21</sup> In the group of thirty-six patients, they reported that four died, a mortality rate of 11 per cent. Two succumbed on the operating table and the other two soon after completion of the operation.

### Conclusions

1. The problem of thromboembolic disease has not been solved as yet, and with the span of human life steadily lengthening, the incidence of it is rising.

2. The morbidity and mortality of the disease can best be reduced by the early diagnosis of it and the use of prophylactic measures, including anticoagulant therapy and bilateral femoral vein interruption.

3. Bilateral femoral vein interruption has proven to be a satisfactory method of therapy in early cases of deep venous thrombosis of the lower



extremities, by preventing death from massive embolism in most cases.

4. A combination of bilateral femoral vein interruption and anticoagulant therapy should be used when deep venous thrombosis is complicated with a non-lethal pulmonary embolism.

5. Further investigations are indicated to determine the patients who may develop thromboembolic disease, since in this way only will it be possible to prevent deaths from massive pulmonary embolism in patients with the silent type of venous thrombosis.

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### TENNIS ELBOW

(Continued from Page 998)

elbow was painful one and one-half years later, being aggravated by bowling.

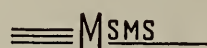
### Conclusions

1. Sixty-three cases of "tennis elbow," studied during the period 1946 through 1947, are analyzed.
2. Conservative measures, consisting of heat, massage, rest, and avoidance of motions causing discomfort, are generally successful. These measures are particularly successful in treating medial epicondylitis.
3. Manipulation under local anesthesia was successful in 77 per cent of the cases wherein it was used.
4. Roentgen therapy was 50 per cent successful in four cases.
5. Incision of the conjoined tendon was successful in eight cases that had proven resistant to other forms of therapy and in one case where it was the only therapy employed.

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Cancer is one of the oldest known diseases. Earliest historical writings describe it and many fossils show signs of its presence.

\* \* \*

Unreasoning fear is one of the greatest obstacles to cancer control.

\* \* \*

Cancer becomes a serious disease only when neglected.

\* \* \*

How big a start did your last cancer patient get on you, and whose fault was it?

# Surgery of Portal Hypertension

## *Portacaval Shunts and a Two-Stage Method in the Poor-Risk Patient*

By Robert R. Linton, M.D., and  
Irada B. Hardy, Jr., M.D.

Boston, Massachusetts

MASSIVE bleeding from the esophagogastrintestinal tract, secondary to cirrhosis of the liver, so-called Banti's syndrome, is a serious threat to a patient's life. Medical therapy has little to offer these patients, as is demonstrated by the following statistics: Shull<sup>16</sup> recently analyzed 131 patients with esophageal varices admitted to the Massachusetts General Hospital from 1935 to 1944. There were 108 cases secondary to cirrhosis of the liver. Forty-one of these patients died from massive hemorrhage, a mortality rate of 38 per cent. During the same period there were twenty cases of Banti's syndrome, and five of these patients succumbed for the same reason, a mortality rate of 25 per cent. None of these patients had the benefit of surgical treatment.

Many surgical procedures have been performed and recommended in an attempt to prevent death from hemorrhage in patients with these diseases. They can be divided into three groups for the purposes of analysis: (A) Reduction of portal bed arterial inflow. (B) Reduction of blood flow through esophageal varices. (C) Reduction of the portal hypertension by anastomosis of the portal venous system to the general systemic venous system, the so-called "shunt" or "by-pass" operation.

### Group A

Two methods have been advocated: (1) ligation of the splenic artery, (2) splenectomy. Ligation of the splenic artery has been recommended because it reduces the portal arterial inflow by as much as 40 per cent in cases of splenomegalia. It was first reported by Blain<sup>3</sup> in 1918, and again by

Watson<sup>21</sup> in 1935, Alessandri<sup>1</sup> in 1938, Berg and Rosenthal<sup>2</sup> in 1942, Linton<sup>12</sup> and Everson and Cole<sup>11</sup> in 1948. The latter authors have recommended this surgical procedure, especially for the poor-risk patient. Portal venous pressures taken before and after ligation and division of the splenic artery and splenectomy have revealed an immediate reduction in some cases. How long the reduced pressure is sustained has not been determined. In the case reported here, following interruption of the splenic artery, the pressure was still low at the end of one month when the shunt operation was performed. However, an analysis of the cases of ligation of the splenic artery reported in the literature reveals only moderate success by this procedure.

Splenectomy is one of the more common methods of treatment, especially for Banti's disease. It is recommended for the same reason as interruption of the splenic artery, that is, it reduces the portal arterial inflow and at the same time it also interrupts some of the veins feeding the esophageal varices. In our clinic, esophagogastrintestinal bleeding has been relieved only temporarily in patients treated in this manner. Some have had repeated hemorrhages within a year and others have had a respite for a few years, but practically all of them have bled again, and in many cases the bleeding has been massive. This data is being collected on these cases at the present time.

In view of these observations, it became obvious to us, since splenectomy and ligation of the splenic artery both reduce the portal hypertension essentially to the same degree but apparently only temporarily, that neither was an adequate form of surgical therapy, and that some more permanent method to reduce the portal pressure should be developed.

### Group B

Various methods have been utilized to reduce the amount of blood flowing through the esophageal varices. The purpose of such procedures is to prevent hemorrhage from these overdistended blood vessels. One of the methods consisted in the transabdominal ligation of the left gastric vein and the veins in the subdiaphragmatic region at the junction of the esophagus and the cardia of the stomach. Walters, Rowntree and McIndoe<sup>19</sup> first reported this method of therapy in 1929. Walters et al,<sup>18</sup> in 1940, reported only moderate

From the Department of Surgery, Massachusetts General Hospital, Boston, Mass.

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improvement in a few patients. Observations in our clinic indicated that the benefit derived has been only temporary, and in view of the like reports from other clinics, the results presumably have been the same.

A somewhat similar and logical method to reduce the blood flow in the esophageal varices was advocated by Churchill and Sweet<sup>7</sup> in our clinic, in which ligation of the periesophageal veins was performed through a transthoracic and transpleural exposure. It was carried out in four patients without permanent benefit. Splenectomy was performed in three of them at the same operation, and even this combined form of therapy was disappointing because of such temporary benefit from severe esophagogastrintestinal bleeding.

The third method consisted of a direct attack on the esophageal varices by injecting them with a sclerosing solution, as first reported by Crafoord and Frenckner<sup>8</sup> in 1939 and later by Walters, Moersch, and McKinnon<sup>18</sup> in 1940. The esophageal varices are visualized in esophagoscopy so that the solution can be injected directly into them. This form of therapy was developed as a result of its use in the treatment of varicose veins of the lower extremities. The chief advantage of it is that it does not require a major surgical operation to carry it out. The results have been far from satisfactory, since just as with this treatment for varicose veins of the lower extremities, the incidence of recurrence is very high, and in a few instances massive hematemesis has occurred shortly after the injections were performed. It seems, therefore, that this form of therapy should be limited to the occasional patient in an effort to stop the esophageal bleeding in order to improve his condition so that a more direct surgical attack on the portal hypertension, such as some form of a portacaval shunt, can be performed.

A fourth procedure has been advocated recently by Phemister<sup>15</sup> to reduce the blood flow through the esophageal varices. It is a formidable operation, consisting of resection of the lower end of the esophagus and the cardia of the stomach with re-establishment of the esophagogastric tract by an esophagogastrostomy. This method, as the others, does not seem to promise a great deal, as one of the two patients so treated had a massive hemorrhage within a year after the operation.<sup>14</sup> Perhaps further studies should be made, but since the portal hypertension *per se* is not affected, it

seems doubtful that this method will prove efficacious.

A fifth method has been advocated by Wangenstein,<sup>20</sup> who has attacked the problem by performing a total gastrectomy and an esophagojejunostomy. He has offered the explanation that esophagogastrintestinal bleeding results from erosion of the esophageal mucosa over the varices due to peptic ulceration, and the elimination of the acid secretion of the stomach by total gastrectomy prevents this from occurring. Be this as it may, it seems not unlikely that the good results he has obtained may be due to reduction of the portal arterial inflow, secondary to interruption of all the gastric arteries, and, in addition, to the reduction of the blood flow in the esophageal varices by division of the esophagus, which necessarily interrupts the venous channels between it and the stomach.

In summary, it may be said of all the methods discussed so far that none attacks directly the cause of the esophageal varices, that is, portal hypertension, so that except in a rare case where there may be an obstruction of the splenic vein following trauma, in which case splenectomy alone will cure the patient, the best that can be expected of any of them is a temporary respite from the esophagogastrintestinal bleeding. The ones that seem to offer at least some palliation are ligation and division of the splenic artery, splenectomy, and total gastrectomy. It is believed that the value of these procedures lies chiefly in the reduction of the portal arterial inflow and a temporary drop, at least, in the portal venous pressure, and at the same time a diminution in the blood flow, and possibly also the venous pressure, in the esophageal varices.

### Group C

A new vista in the treatment of the baffling condition of portal hypertension has appeared in recent years. The chief credit for this must go to Whipple<sup>22</sup> and Blakemore and Lord<sup>5</sup> for renewing our interest in shunting blood around the barrier in the portal bed which may be either extrahepatic or intrahepatic. Ever since Eck,<sup>10</sup> in 1877, first reported the successful performance of an anastomosis between the portal vein and the inferior vena cava in dogs, it has been the hope of the clinician and the ambition of the surgeon to create such a by-pass in the patient with portal

hypertension. Numerous attempts were made in the early part of this century. Some of these were reported, but probably many more, because of failure, were not. Due to the inability of performing a satisfactory direct shunt, attention was directed to the indirect type, known as the Talma-Morison operation or omentopexy. The first one was performed by Morison<sup>9</sup> and later popularized by Talma.<sup>17</sup> It was hoped by this procedure to create numerous small collateral anastomoses which would allow blood to flow through the omental veins into the veins of the anterior abdominal wall, thereby developing new channels, through which the portal blood could escape into the systemic venous system without having to traverse the esophageal veins. Again, many of these operations have been performed, both in our clinic and in others, but the results on the whole have been disappointing, chiefly due to the fact that the portal hypertension is not reduced sufficiently to take the load off the esophageal varices. Cates,<sup>6</sup> in 1943, analyzed 117 consecutive cases of cirrhosis of the liver treated purely by medical therapy and thirty-eight cases in which omentopexy had been performed. This study revealed that 72 per cent of the medically treated patients died within one year and 68 per cent of the ones subjected to omentopexy died within a similar period. Such results certainly do not recommend this form of surgical therapy, and today it has been practically abandoned in all clinics.

For the past three years, in our clinic, direct venous shunts have been performed in patients with portal hypertension. These have consisted of the following types of venous anastomoses: (1) the splenic vein and the left renal vein, (2) the portal vein and the inferior vena cava, (3) the superior mesenteric vein and the inferior vena cava, (4) the inferior mesenteric vein and the left adrenal vein, (5) the inferior mesenteric vein and the left ovarian vein.

The results to date have been extremely encouraging in those patients in whom a satisfactory anastomosis was obtained, but necessarily a further period of observation is required to determine the true value of this form of therapy. The recent perfection by Blakemore and Lord<sup>4</sup> of blood vessel anastomoses by the non-suture technique, using vitallium tubes, restimulated surgeons in attacking the problem of portal hypertension. Whipple<sup>22</sup> and Blakemore and Lord<sup>5</sup> were the first to report

a group of patients in which this method of venous anastomosis was utilized to produce portacaval shunts. They describe two types of shunts: (1) an end-to-end anastomosis between the splenic vein and the left renal vein, with a splenectomy and a nephrectomy at the same operation, and (2) an end-to-side anastomosis between the end of the portal vein and the side of the inferior vena cava. In our clinic, we have modified the splenorenal type of anastomosis by preserving the left kidney and performing an end-to-side splenorenal shunt. One of the chief advantages of this modification is obvious, since the left kidney is spared. It is also recommended because it produces a partial shunt of the portal blood flow so that the liver is not completely by-passed, and from our observations on the portal venous pressure before and after performing the shunt, it appears to lower the portal hypertension satisfactorily. For a further discussion of this phase of the subject, the reader may refer to the recent article from our clinic.<sup>13</sup>

Portacaval shunts have been performed at the Massachusetts General Hospital on twenty-seven patients with portal hypertension. The first one performed was in March, 1945, by Richard H. Sweet. An analysis of these cases reveals that the portal bed block was intrahepatic in seventeen patients and extrahepatic in ten patients. The ages of the former group ranged from twenty-seven to sixty years with a mean of forty-five years, whereas in the latter, they were from six to sixty-five years, with a mean of twenty-nine years.

Numerous types of portacaval shunts have been performed in the twenty-seven patients. Summarizing them, it is found that twenty (74 per cent) have been splenorenal shunts, three (11 per cent) portacaval, two (7 per cent) superior mesenteric to inferior vena cava, and one each of inferior mesenteric to left renal vein and left ovarian vein. Six patients died following the operation, a mortality rate of 22 per cent. The anastomosis was considered unsatisfactory in two patients. For this reason, there are only nineteen patients with satisfactory venous shunts. This group includes seventeen splenorenal anastomoses, one superior mesenteric to inferior vena cava and one direct portal vein to inferior vena cava. The results of this type of surgical therapy have been encouraging to date, because only one of the nineteen patients, in whom a splenorenal anastomosis



was performed, has bled from the esophagogastrintestinal tract since the operation. This occurred twenty-six months following the procedure. The longest period of observation since operation without bleeding has been over three years. These results are especially gratifying since several of the patients had had previous types of operations performed, such as splenectomy, omentopexy, ligation and division of the left gastric and coronary veins, ligation of the periesophageal veins through a transthoracic exposure, and several patients had had numerous injections of the esophageal varices with a sclerosing solution. At the present writing, however, it is too soon to state whether or not these patients have been cured until they have been observed for a longer period, especially since eleven of them were operated on between January and July, 1948.

The splenorenal shunt was used in most instances because it produces a partial shunt of the portal blood flow so that the liver is not completely by-passed, and at the same time, in our experience, it seems to reduce satisfactorily the portal hypertension, as determined by measurements of the portal venous pressure before and after the formation of the shunt. Another important reason for using it is that in six patients in this group an attempt was made to perform a direct portacaval anastomosis, and in each case the procedure had to be abandoned because of the extreme vascularity in the gastrohepatic ligament, which prevented the exposure of the portal vein. Patients, especially in the extrahepatic group, who had had a previous splenectomy, presented a difficult problem because the splenic vein could not be found, and the portal vein in five out of six of these patients could not be isolated because of the so-called "cavernomatous" change in the gastrohepatic ligament. For this reason, a superior mesenteric vein to the inferior vena cava anastomosis was performed successfully in one patient, and an inferior mesenteric to the left renal and an inferior mesenteric to the left adrenal vein were used in the two others. The latter have only given temporary benefit, presumably because of the small size of the veins used. In two of the splenectomized patients, despite multiple attempts, no satisfactory vein in the portal system of either of them has been found with which to construct a satisfactory shunt. For this reason, as previously pointed out,<sup>12</sup> it is believed that any surgeon who

does a splenectomy for portal hypertension should perform a splenorenal anastomosis at the same operation, since this may be the only opportunity to construct a satisfactory shunt. There were six patients who died following the operative procedure, so that the operative mortality rate for the twenty-seven patients has been 22 per cent. If this figure is broken down, it is found that no operative deaths occurred in the ten patients with the extrahepatic type of portal bed block or Banti's syndrome and that all the six deaths occurred in the intrahepatic or cirrhotic group. One patient died as the result of postoperative thrombosis of the hepatic artery following a direct portacaval anastomosis. This undoubtedly was a technical error resulting from trauma to the blood vessel at the time of the operation. It was in part, at least, due to the difficulty encountered in isolating the portal vein because of the increased vascularity in the gastrohepatic ligament. Another patient died from esophagogastrintestinal hemorrhage and renal failure following an attempt at anastomosing the superior mesenteric vein and the inferior vena cava. In this case, the shunt was not a satisfactory one, but due to a previous splenectomy and the cavernomatous change in the region of the portal vein, it was necessary to resort to this type. Four patients died, it is believed, from liver failure. In three of them, uncontrollable postoperative hemorrhage from the site of the operation played a role in the fatal outcome despite careful preoperative preparation, including the correction of prothrombin levels in the blood and the use of multiple citrate and direct blood transfusions, preoperatively, postoperatively and during the operations. It is interesting that the bleeding tendency did not manifest itself for the first two hours of the operation, but thereafter a continuous capillary ooze developed and persisted through the remainder of the procedure. Since the usual time to complete one of these operations is approximately four hours, it is very important to have an adequate supply of blood to prevent surgical shock from blood loss, and in a number of cases autotransfusions have been utilized with benefit. Ether was used as the anesthetic in all these patients, administered through an endotracheal tube.

It is worth while drawing attention to the fact that all six of the patients who died were poor surgical risks and the operation was performed on



most of them as a last resort to prevent death from esophagogastrintestinal hemorrhage. It is to be emphasized therefore that a portacaval shunt should never be considered an emergency life-saving procedure, since the critically ill patient cannot withstand such an extensive operation. Of interest, also, is the fact that five of the deaths occurred early in the series, whereas only one patient has died in the last eleven patients operated upon. Considering only the cirrhotic patients, there has been but one death in the last ten of these patients subjected to the procedure. The improvement in the recent mortality statistics undoubtedly is due to several factors. In the first place, the technical procedures of the operation have become more familiar, so that it has been possible to shorten the time of the operation. A more careful selection of the patients also has been made, so that those who are obviously too depleted are prepared until they are in better condition, or they are not operated upon if they obviously will not withstand the procedure.

More recently a two-stage operative procedure has been advocated in the poorer risk patient, suggested first by one of us (I.B.H.). The performance of the splenorenal shunt as a two-stage surgical procedure has, it is believed, probably saved the life of one patient and made it possible to perform successfully a functioning portacaval shunt. In view of the fact that many of the cirrhotic patients are what one might consider poor surgical risks, it seems worth while to draw attention especially to this type of surgical approach to the problem of portal hypertension. The first stage consists of interruption of the splenic artery by ligation and division as it courses along the superior border of the pancreas. A left paramedian upper abdominal incision is made. The lesser peritoneal cavity is opened by dividing the gastrosplenic ligament to expose the splenic artery in this location. The paramedian abdominal incision is utilized in order to minimize the abdominal adhesions that will be encountered in the left upper quadrant at the second stage, and thus facilitate the splenectomy and splenorenal anastomosis. Extreme care must be taken in isolating the artery not to tear the splenic vein because in order to control the bleeding from it under such circumstances, the vessel would be so damaged that it undoubtedly would preclude the performing of a satisfactory splenorenal shunt at the second

stage. This technical error, of course, would be especially disastrous to the patient who has the cavernomatous change in the gastrohepatic ligament, which makes it impossible to perform a direct portacaval anastomosis. After interrupting the splenic artery, a biopsy of the liver may be taken for diagnostic purposes. It is also interesting and of some value to measure the portal venous pressure before and after interrupting the artery, and again at the second stage before and after the splenectomy and the construction of the splenorenal shunt, as was done in the case reported here.

Despite the somewhat optimistic report of Everson and Cole<sup>11</sup> in regard to the treatment of portal hypertension by interruption of the splenic artery, it is believed advisable to consider this only as a temporary measure, and that after the patient's condition has improved, a splenectomy and a portacaval shunt should be performed. The period between the stages will probably vary somewhat for each patient, depending on the rate of improvement in each case. The chief indication, it is believed at the present time, for the two-stage type of operation, is continued and uncontrollable bleeding from the esophagogastrintestinal tract in a depleted patient, especially with poor liver function.

This type of procedure has been performed satisfactorily in a fifty-year-old white man, with cirrhosis of the liver and continued esophagogastrintestinal bleeding. In spite of fourteen transfusions of 500 c.c. each during twenty-three days in the hospital, it was only possible to raise his hemoglobin from 6.3 gm. to 9.7 gm. Accordingly, the splenic artery was interrupted through a transabdominal left paramedian incision, opening the lesser peritoneal cavity by dividing the gastrosplenic omentum. Some difficulty was encountered in isolating the splenic artery, but this was finally done without damage to the splenic vein. The artery was doubly ligated and divided between the ligatures. It is of interest that the portal venous pressure before interruption was 37.5 centimeters of normal saline solution, and after interruption it was 28.5 centimeters. A biopsy of the liver was also taken, which revealed portal cirrhosis. The patient withstood the operation well, and four days following it, the esophagogastrintestinal bleeding ceased. The hemoglobin rose rapidly to 12 gm. and remained there without further trans-



fusions. He was readmitted to the hospital one month later, and through a combined thoracoabdominal incision, as has been previously described,<sup>13</sup> a splenectomy and an end-to-side splenorenal shunt were performed. Again, the patient withstood the operation surprisingly well and was discharged home from the hospital fifteen days later. It is interesting to note, also, that the initial portal venous pressure at the second stage of the operation was 23 centimeters of saline solution, and following the completion of the splenorenal shunt it had dropped to 14 centimeters. This decrease in the portal pressure is gratifying and reveals that the splenectomy and splenorenal shunt have reduced the portal hypertension at least temporarily almost to a venous pressure within normal limits.

### Discussion

Shunting of the portal blood by means of various types of portacaval anastomoses seems at the present time to offer the patient with portal hypertension the best form of treatment. In our clinic, the majority of the patients have had a one-stage splenectomy and an end-to-side splenorenal shunt performed through a thoracoabdominal incision. The results to date in eighteen of the nineteen patients in whom a satisfactory anastomosis was performed are very encouraging, but obviously a further period of observation of these patients is necessary to evaluate the procedure. Because of a relatively high mortality rate in the patients with cirrhosis of the liver, especially those who are badly depleted, it is now recommended that the formation of the splenorenal shunt should be performed in two stages, the first one consisting of ligation and division of the splenic artery, and the second stage a splenectomy and an end-to-side splenorenal shunt.

A number of factors have contributed to the successful results obtained in recent years in the performance of these extensive operations, as compared to the earlier attempts thirty-five years ago. The preoperative condition of the patient frequently can be improved by multiple transfusions, human albumin, intravenous glucose, and also protein in the form of amigens, and diet, and vitamins. Following the operation, the same measures are frequently used with great benefit, and, in addition, special attention is directed toward the proper fluid and electrolyte balance. Great advances have also been made in anesthesia so that the anesthetic

may be given more safely for long periods and, frequently to facilitate the operative exposure, a combined thoracoabdominal incision may be utilized without jeopardizing the patient's condition. An all-important factor has been the development of better surgical techniques, including such factors as finer instruments and especially the fine braided silk on atraumatic needles with which to perform the venous anastomoses. The modern development of the blood bank has also played an important part. These operations cannot be performed safely without having multiple transfusions available during the procedure. In addition there undoubtedly has been an improvement in the surgeon's technique, chiefly the result of the factors noted above, since they permit him time to perform the meticulous type of operation that is necessary without haste in these patients.

### Conclusions

1. The recent development of portacaval shunts in the treatment of portal hypertension at the present time seems to provide the most effective method for controlling bleeding from the esophageal varices in patients with cirrhosis of the liver and so-called Banti's disease.
2. In the seriously ill patient, it is recommended that a two-stage procedure be utilized, the first stage consisting of ligation and division of the splenic artery, and the second consisting of splenectomy and splenorenal end-to-side anastomosis.
3. It is also suggested that ligation and division of the splenic artery could be used as a first-stage procedure for a direct portacaval anastomosis, if this type of shunt proves to be the more desirable.

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# Arteriovenous Shunts for Revascularization of Ischemic Limbs

By Prescott Jordan, M.D.  
Detroit, Michigan

DECREASED ARTERIAL blood supply to the lower extremity is common, and the usual methods used to increase arterial blood flow have not been uniformly successful in our experience. We have used repeated paravertebral blocks,<sup>3,4</sup> etamon,<sup>2</sup> intravenous ether solution<sup>6</sup> and lumbar sympathectomy, either alone or more frequently in combination, without too spectacular success except in a few instances. The generally disheartening results, especially in cases where areas of gangrene are present or impending, impelled us to seek other more direct means for attacking the problem of poor arterial blood supply to the legs and feet.

Claude Beck has shown rather conclusively that ischemia of the heart following ligation of the coronary vessels could be prevented by utilizing the coronary veins for carrying arterial blood.<sup>1</sup> After a visit to Dr. Beck's laboratory we were able to prove to our satisfaction in our own laboratory that adequate coronary arterial blood could be supplied through the coronary veins. This procedure in effect produces an arteriovenous anastomosis between the aorta and the coronary sinus. The principle of using an intact vein to carry arterial blood to a part otherwise poorly supplied appeared to us to offer a direct attack on the problem of decreased arterial blood supply to the legs and feet.

Before such a procedure could be utilized, it seemed important to determine whether arteriovenous effects such as described by Holman<sup>5</sup> would occur. In a series of nine dogs, three-limbed arteriovenous shunts were prepared between the femoral or iliac artery and their corresponding veins, and no acute arteriovenous effects were noted. In 1924, Holman<sup>5</sup> wrote his fundamental work on this problem and showed experimentally that in arteriovenous fistulas the blood cellular and plasma volumes are increased and that if the fistula was large the volumes would increase to

such an extreme as to be incompatible with an efficient cardiac output. It is this increased load which is the etiology of the associated right heart failure. Doctor Holman's fistulas were four-limbed—proximal and distal arterial and venous limbs. Arteriovenous fistulas constructed by us are three limbed—proximal and distal arterial limbs and a distal venous limb. Cardiac size is some measure of the load volume a heart is subjected to. When the proximal artery of a four-limbed fistula is clamped, the cardiac silhouette returns to a normal preoperative size, but when the proximal vein is clamped, the heart silhouette becomes smaller than the normal original size, thus clearly demonstrating that there is no acute increase in cardiac load with a three-limbed fistula. In the dogs thus far studied, there has been no increase in plasma or cellular volumes. However, the duration of these experiments has been short, and we do not know whether anastomotic veins may dilate to produce, in effect, a four-limbed anastomosis with later cardiac enlargement. Therefore, the body's immediate response in a three-limbed fistula is not an increase in blood volume, and there appears to be no immediate risk of cardiac failure.

If the arterial blood shunted into the venous system does not go directly into the afferent veins, it must proceed into the distal limb via the venous route. Clinically, this is apparent by the increased warmth of the shunted leg and proven by the thermocouple which always shows a 2° to 3° rise in temperature. That such retrograde flow is possible anatomically can be shown on arteriography as a column visualized down the venous pathway, even though the venous valvular system is opposed to such a flow.

The technique which we have used in the human is an end-of-vein-to-side-of-artery anastomosis at the level of the superficial femoral vessels below the entrance of the profunda femoris vein. An everting intima-to-intima anastomosis is easily accomplished here, and as an elliptical segment of the artery is removed, no impediment is offered to the flow of blood from the artery to the veins.

Up until this time we have operated upon nine patients. All of these patients were considered to have peripheral arterial decrease of such extent that amputation seemed necessary or appeared imminent. We felt in each instance that we had only possible gain through the shunting procedure

From the Department of Surgery, Wayne University College of Medicine and the Detroit Receiving Hospital.



since, if communicating veins between the superficial femoral veins and the profundus or saphenous veins produced, in effect, a four-limbed arteriovenous anastomosis, the shunt could be tied off, and the result would be no different than that of the commonly employed superficial femoral vein ligation. Of these patients, five were arteriosclerotic patients with symptoms of ischemia or evidence of gangrene present. Of the non-arteriosclerotic patients, one had Buerger's disease with a large gangrenous slough which normally would have required an amputation. However, after a shunt, the man's lower leg was saved. A second man had had a large popliteal aneurysm removed without re-establishment of the continuity of his vessel, with subsequent development of areas of dry gangrene in the lower leg and foot. After his shunt, he had no further progression of the gangrene. The third non-arteriosclerotic patient was a young man with gangrene of both feet and the lower leg to the mid-calf region, which had followed frostbite and immersion of his feet in hot water. A shunt was done on one side, and the sharp line of demarcation previously present receded three inches. However, this may have been due only to superficial damage, with subsequent recession of his gangrenous level to an area indicating more complete damage to deeper tissues.

Of the five arteriosclerotic patients, four had dry gangrene of either the foot, leg or complete limb, and shunts in these patients were technically difficult because of the uniform finding of a severe chronic inflammation about and within the large vessels and because of thrombosis of the artery, the thrombi being difficult of removal. Only one of this group did not have gangrene, but clinically had severe ischemic symptoms and crippling claudication. A shunt was possible on only the least severe of the two legs, and in this leg the pain was relieved and the claudication improved by distance testing.

The ninth case was to us our most encouraging one, making us hopeful of the soundness of this procedure. The patient was a young man who developed sudden pain in his right leg with swelling and severe tenderness in the calf and foot. Examination revealed no palpable peripheral pulses in this foot, with coolness of the foot and early ischemia of the great and second toes. There were areas of superficial skin necrosis over the dor-

sum of the foot and the middle of the leg, and a palpable mass in the popliteal fossa with strange popliteal pulsation. The patient had an exploratory operation four days after this sudden onset of symptoms, and an aneurysm of the popliteal artery, with occlusion of it and the anterior and posterior tibial arteries, was found. An end-to-end arteriovenous shunt between the femoral artery and popliteal vein was accomplished. Postoperatively the patient's leg became warm, and the pain decreased after twenty-four hours, at which time all but the distal one-half of the great and second toes and the small area on the mid-leg had become normal in appearance and feeling. One month after operation he had only a small residual ulcer over the second toe, an ulcer on the first toe being completely healed. At present, the involved leg and foot are pinker than the normal, especially when the leg is dependent. The patient can move all parts of the leg and foot, but there still remains a slight difficulty in dorsiflexion of the foot. The residual evidences of damage are improving, and the patient is able to walk on the foot. This would seem to indicate that arterial blood is reaching and being utilized by the tissue even though it makes its entrance via the venous system.<sup>1</sup>

The results in this group with hopelessly involved extremities have not been brilliant but have offered definite advantages. The legs have become warmer, and the spread of gangrene has been controlled. No attempt was made to select these cases except on the basis that no other help could be offered them. The immediate effects of the shunt have been good. While we do not expect later cardiac sequelae, we are following up these patients carefully. We shall continue to study them until we can be sure no late detriment ensues. In the interim we are continuing to choose only those cases in which gangrene is already present or appears imminent. Further laboratory studies are under way in order to explore the physiologic and morphologic changes associated with these shunts, especially in reference to their use in cardiac vascular and peripheral vascular abnormalities.

I wish to thank Dr. Charles G. Johnston, professor of surgery, Wayne University College of Medicine, and director of surgery, City of Detroit Receiving Hospital, for suggesting this problem to me and for his criticisms and help in carrying it out.

(References on Page 1028)

# Office Treatment of Lesions of the Cervix

By Harold A. Ott, M.D., F.A.C.S.  
Detroit, Michigan

ALTHOUGH it is one of the smallest structures of human female anatomy, the uterine cervix often is a hazard to general health and all too frequently becomes a threat to life. Fortunately, however, many of its lesions are amenable to office treatment. In this discussion, certain of the lesions which may be encountered will be reviewed, detailed attention will be given to their proper diagnosis, and methods of treatment which may be accomplished in the office will be outlined (Table I).

Developmental lesions usually are anomalies of the Mullerian ducts. These should be recognized and search made for the frequently associated anomalies of the intrapelvic genitalia and urinary tract. Their treatment, generally, is surgical. Erosion, frequently confused with ectropion and ulceration, is a developmental defect in which there is a crowding of the columnar epithelium of the cervical canal onto the portio vaginalis with displacement of the stratified squamous epithelium. This produces a velvety red areola about the external os. Such erosion, often termed pseudo-erosion, is seen in the virginal female, and unless there is an infectious involvement of the glands, no treatment is required.

Traumatic lesions result most commonly from childbirth, although some, such as strictures of the endocervix, may be produced by injudicious treatment of cervical lesions. Laceration is an inevitable consequence of vaginal delivery and distinguishes the parous woman. Routine inspection of the cervix following delivery is commonly urged, and when properly done it should be no cause of infection. The cervix always should be inspected with good light and adequate exposure following precipitate labors and deliveries, operative deliveries, and whenever there is unusual bleeding following expulsion of the placenta. Small lacerations heal with little or no cervical deformity. More extensive lacerations generally will produce deformity if not repaired. Coaptation of the torn edges with interrupted sutures tied lightly is easily

TABLE I. LESIONS OF THE CERVIX UTERI

Lesion	Diagnostic Aids	Treatment
A. <i>Developmental</i>		
1. Mullerian duct anomaly	Inspection and palpation	Surgical
2. Erosion	Inspection and biopsy	None or cautery
B. <i>Traumatic</i>		
1. Laceration	Inspection	Cautery, tracheloplasty
2. Ectropion	Inspection and biopsy	Cautery, tracheloplasty, conization
3. Nabothian cysts	Inspection and biopsy	Cautery, tracheloplasty, conization
4. Stricture	Instrumentation	Graduated dilatation
C. <i>Neoplastic</i>		
Benign:		
1. Myoma	Palpation and biopsy	Surgical
2. Polyp	Inspection and biopsy	Removal, cautery
3. Endometriosis	History and biopsy	Surgical
4. Metaplasia	Biopsy	Repeated biopsy
5. Leukoplakia	Biopsy	Surgical
Malignant:		
1. Epidermoid carcinoma	Biopsy	Radiation
2. Adenocarcinoma	Biopsy	Radiation
D. <i>Infectious</i>		
1. Gonorrhea	Smear and culture	Penicillin systemically
2. Syphilis	Dark field and biopsy	Anti-syphilitic
3. Tuberculosis	Biopsy	Surgical
4. Granuloma inguinale	Tissue smear and biopsy	Antimony, streptomycin
5. Chancroid	Skin test and biopsy	Sulfonamides
6. Condyloma acuminata	Inspection and biopsy	Hygiene, cautery, podophyllin
7. Monilia	Fungus in NaOH spread	Gentian violet, propionate jelly
8. Trichomonas	Organism in wet smear	Arsenic and silver salts, cautery
9. Nonspecific bacterial	Elimination	Douches, jellies, cautery

accomplished. Ectropion or eversion is a rolling out of the endocervical columnar epithelium and stroma, produced by infection and facilitated by lacerations. Nabothian cysts form by occlusion of the lumina of the mucus secreting glands. Careful postnatal examination and early treatment of discovered lesions usually will restore the cervix to normal and prevent the development of the severely infected and hyperplastic cervixes which require radical surgical treatment. Lacerations, ectropion, and Nabothian cysts usually can be treated by the actual cautery in the office. When severe, conization or tracheloplasty is required and necessitates hospitalization. Strictures of the endocervical canal occasionally are found in conjunction with severe infection and with neoplastic involvement but more often result from improper cauterization or incomplete after-care following cautery, conization or other operative procedures on the cervix. They are best treated by preventing their occurrence. Graduated dilatation is curative for minor degrees of stricture. Severe occlusive strictures are major surgical problems.

Neoplastic lesions as a rule are not to be treated in the office. However, they must be recognized and diagnosed, since error here may lead to regret-



table results. Myomas and endometriosis are rare but should be kept in mind whenever there is significant enlargement of the vaginal cervix. Polyps are often found but malignant change is uncommon. Unfortunately, genital bleeding too often is attributed to the discovered polyp and no further examination made. Thus, a coexisting endometrial or cervical carcinoma may be overlooked. Genital bleeding should never be accepted as due to a cervical polyp until malignant neoplasms are eliminated as a cause. Cervical polyps most usually arise from the endocervix. They should be removed and sent for histological examination. Small polyps may be twisted off with forceps or removed with a tonsil snare. Large polyps with an accessible base may be removed with cautery, but this is more safely done with hospital facilities. Recurrence of cervical polyps calls for dilatation, curettage, and light cauterization of the canal under anesthesia, definitely a hospital procedure.

Metaplasia and leukoplakia are benign changes of the epithelial cells, the first being a transformation of columnar epithelium into squamous epithelium, frequently a part of the healing process of traumatic and infectious lesions. However, with unusual cellular hyperactivity it is difficult at times to distinguish it from malignant change. Leukoplakia usually has marked epithelial hyperactivity and is more closely related to early malignant lesions. The definitely malignant neoplasms, epidermoid carcinoma which arises from the squamous epithelium and adenocarcinoma which arises from the columnar epithelium, constitute almost 90 per cent of genital malignancy in the female. Because of this high incidence and because of the regrettable inability to obtain satisfactory end results except in the very earliest cases, carcinoma of the cervix must be kept in mind constantly.

Infectious lesions which may involve the cervix may be divided into four groups. First is the venereal group, including gonorrhea and syphilis. The granulomatous group is second and includes tuberculosis, granuloma inguinale, chancroid and condyloma accuminata. Third are those infections usually secondary to a vaginitis, such as monilia and trichomonas infections. The fourth group is the nonspecific bacterial infection, probably the most frequent type of infectious lesion. These infectious lesions usually are amenable to office treatment.

TABLE II. CERVICAL BIOPSY

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- |     |   |
|-----|---|
| A.  | Performed to establish, rarely to confirm, diagnosis                              |
| B.  | Only certain means of insuring nonmalignant lesion                                |
| C.  | <i>Always biopsy:</i>   |
| 1.  | Suspicious lesions  |
| (a) | Small area resembling granulation tissue which bleeds readily                     |
| (b) | Small polyp   |
| (c) | Small ulcer   |
| (d) | Small leukoplakic spot  |
| (e) | Small hard area covered by normal appearing epithelium                            |
| 2.  | Whenever bleeding occurs from the cervical stump                                  |
| 3.  | Normal appearing cervix with history of post-coital or post-traumatic bleeding    |
| 4.  | Lesions with previous negative biopsy which fail to heal with adequate treatment. |
| D.  | <i>Technique:</i>   |
| 1.  | Thorough bimanual and visual examination  |
| 2.  | Application non-staining antiseptic to portio and external os                     |
| 3.  | Probe cervical canal—dilate if stricture or bleeding is encountered               |
| 4.  | Take adequate tissue from squamo-columnar junction or edge of lesion              |
| 5.  | Small sharp curet to obtain specimen from canal after dilatation                  |
| 6.  | Remove base along with polyp  |
| 7.  | Gauze pack to control bleeding  |
| E.  | No treatment until diagnosis is fully and unequivocally established               |
| F.  | Continue observation until lesion is completely healed                            |
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How are these cervical lesions to be managed? How shall they be treated in the office? No treatment of any disease should be attempted without first having arrived at an acceptable diagnosis. The gross appearance of the various cervical lesions will not be described. They are well illustrated in any standard gynecological text, and a brief study of these will make their recognition a matter of intelligent observation. The simple and innocuous lesions are readily diagnosed; the difficult and serious lesions require laboratory aid in their diagnosis. In no other situation is the biopsy more informative and more easily obtained.

Taking a cervical biopsy is a painless procedure and it can be done rapidly with a minimum of equipment. This simple means of arriving at a definite diagnosis is not utilized with the frequency it deserves. Because often it is not properly performed, it shall be considered in detail (Table II). It should always be kept in mind that the biopsy is performed to establish, rarely to confirm, the diagnosis of the lesion. It is the only certain method of insuring that it is not malignant. Biopsy should always be resorted to whenever there is the slightest doubt regarding the nature of the cervical lesion. Pregnancy is no contraindication to biopsy. Many clinical carcinomas have been overlooked because the cervix was not examined when bleeding or spotting occurred during pregnancy.

All lesions which evoke the slightest suspicion of malignancy must be biopsied. Guerriero and Mantho, in a series of 123 patients on whom biopsy

was done because of suspicious appearing lesions, found the following.<sup>2</sup>

Cervicitis	79 cases	64.0%
Carcinoma	24 cases	19.4%
Adenocanthoma	3 cases	2.5%
Cervical polyp	3 cases	2.5%
Cervical myoma	3 cases	2.5%
Granuloma inguinale	3 cases	2.5%
Leukoplakia	2 cases	1.6%
Metaplasia	2 cases	1.6%
Tuberculosis	2 cases	1.6%
Tertiary syphilis	1 case	0.8%
Chancroid	1 case	0.8%

In this group, twenty-seven patients had a definite malignant lesion, four had lesions with malignant potentialities, two had lesions which require radical surgical treatment, five had lesions for which specific therapy is available. The remaining eighty-five lesions were amenable to office treatment.

One should regard with grave suspicion any area on the cervix which resembles granulation tissue and which bleeds when touched with an applicator—the possibility of its being malignant is great. Almost equally suspicious are small ploys, small ulcers, and small leukoplakic spots—malignant invasion may already have started. When palpation discovers a hard area on the cervix, it also should be biopsied even though covered by normal appearing epithelium. Biopsy should always be done whenever bleeding occurs from the cervical stump. A recent study revealed that in 46 per cent of such patients the bleeding was caused by carcinoma.<sup>1</sup> Post-coital bleeding and bleeding which follows douching, instrumentation, or walking are other imperative indications. Unfortunately, bleeding is a late symptom in 30 per cent of all cervical carcinomas. Last on the list of situations in which biopsy is mandatory are those lesions which previously have been biopsied and no malignancy demonstrated, and which fail to heal despite adequate treatment. It should be an inflexible rule that when biopsy does not discover malignancy, both the patient and the lesion should be kept under constant observation until the lesion is eradicated or healed.

Biopsy should always be preceded by a careful general and thorough pelvic examination. The external genitalia should be systematically inspected and palpated and the intrapelvic genitalia palpated bimanually through both the vaginal and

rectal canals. Examination of the cervix begins with vaginal and rectal palpation and is completed by visual examination with good illumination, utilizing the speculum. Discharge present in the fornices, on the portio, as well as in the vaginal canal, should be collected and studied by wet and stained smears and, as indicated, by other laboratory methods. Excess discharge must be removed so that the entire field can be inspected carefully. The mucus plug extruding from the external os is easily removed with saturated sodium bicarbonate solution. After all local discharge has been removed, apply a non-staining antiseptic. Probe the cervical canal with a uterine sound to determine its patency or the presence of endocervical lesions, suggested by the appearance of blood or pus at the external os following such instrumentation. If such occurs, a plop or adenocarcinoma may be present, and the canal should be dilated and carefully examined. Biopsy is facilitated if the cervical canal is dilated before the specimen is taken.

The technique of biopsy is simple. A biopsy forceps, scalpel, or scissors may be used. For endocervical lesions a small sharp curette is very useful. Always take a generous portion of tissue from the lesion, including adjacent, apparently healthy tissue. Most epidermoid carcinoma begins at the squamocolumnar junction and this area should be included in the specimen. When suspicion of malignancy is strong, biopsies should be taken from both lips or, more preferably, from each quadrant of the cervix. When polyps are removed a section of the base should be included since malignancy is most apt to be found here. After the tissue has been removed, it should be placed in a fixing solution, such as 10 per cent formalin, and sent to a competent gynecological pathologist for diagnosis. One should be certain that the specimen is adequate, and one should not be deterred by bleeding. Bleeding can be controlled by packing with oxidized cellulose or iodoform gauze. It is best to avoid applying the cautery to the biopsy area since this will distort the remaining tissue to such an extent that if further biopsy is requested, if the lesion is of questionable malignancy, a proper specimen may not be obtained until invasion has progressed considerably. Similarly, treatment should not be undertaken until the nature of the lesion is fully and unequivocally established. The Philadelphia Committee for the Study



of Pelvic Cancer in the one-year period from December, 1945, to December, 1946, encountered 116 cases of unwarranted delay in the diagnosis of pelvic cancer.<sup>3</sup> In seventy-eight instances this was due to "physician delay" and in the remaining thirty-eight cases to "patient and physician delay." Moreover, thirty-one of these 116 patients whose symptoms were highly suggestive of uterine carcinoma were not examined but were merely treated with oral or hypodermic medication. If the results in the treatment of genital malignancy are to be improved, the diagnosis must be established early in the disease.

The infectious group of cervical lesions are the most common and are readily amenable to treatment in the office. Specific systemic therapy is available for those of the venereal group. Acute gonorrheal cervicitis, diagnosed by history, substantiated by the results of the Gram stain smear, with or without culture, is best treated with penicillin—300,000 Oxford units in oil given daily for three days. Syphilis of the cervix, demonstrated by dark field or biopsy, should be treated by general antisyphilitic measures, including the arsenicals and bismuth in conjunction with penicillin. Tertiary syphilitic lesions should be treated with caution to avoid cardiovascular and visceral complications.

The granulomatous lesions are infrequently encountered in private practice. Tuberculosis of the cervix is rare and usually is preceded and accompanied by adnexal and endometrial involvement, necessitating radical surgical extirpation. Granuloma inguinale is a common lesion in the Negro and does involve the cervix. Diagnosis is made by demonstration of Donovan bodies in the tissue smear or biopsy. Treatment includes penicillin and sulfonamides systemically, sulfonamide powder or jellies locally, and antimony compounds, such as fuadin, 5 c.c. three times weekly for four to six weeks. Streptomycin recently has been reported as effective. Chancroid, a highly infectious lesion caused by *Hemophilus ducreyi*, is uncommon. Treatment includes sulfonamides both systemically and locally for seven to ten days. Condylomata acuminata often accompanies a severe nonspecific cervicitis. Local hygienic measures and the healing of the cervicitis by cautery frequently produces gradual disappearance of the warty excrescences. Those which remain can be destroyed by the cautery when they are on the

cervix, or by electrodesiccation or 20 per cent podophylin in oil or tincture of benzoin elsewhere in the lower genital tract. Occasionally the lesion may be so extensive that surgical excision under anesthesia is required.

Monilia infections of the cervix always have an associated vaginitis. The gross appearance with the characteristic white flakes on the reddened edematous mucosa is unique, and the diagnosis is easily confirmed by microscopic demonstration of the fungus. This disease occurs with great frequency during pregnancy. It is easily and satisfactorily treated with gentian violet, 2 per cent aqueous solution. A non-staining propionate jelly has given good results, is more acceptable to the patient and may be applied at home.

Trichomonas vaginitis appears to be a chronic disease of about 80 per cent of all adult females. In its more severe forms, the cervix, as well as Skene's and Bartholin's glands, and the urinary bladder are involved. When acute, only mild local treatment is tolerable. The preparations and regimens utilized are legion, indicating that there is no certain-cure treatment. Arsenical and silver salt preparations in powder and vaginal suppository form are most generally used, with or without acid douches. Beta-lactose and lactobacillus powders also have been successful. However, it is wise to be familiar with more than one method of treatment since none works in all cases. Recurrence of the infection frequently is due to deeplying cervical involvement, and success often follows cauterization of the ectropion and retention cysts which may be present. It is important to cauterize the angles of lacerations, since these may form pockets which act as constant sources for reinfection.

The most common lesion of the cervix, nonspecific bacterial cervicitis, is rarely seen in the nulliparous cervix except as a mild involvement of a congenital erosion. Most usually it appears as a complication of laceration and ectropion. Acute infections must be treated conservatively by means of proper hygiene and local applications, to avoid extension of the process to the upper genital tract. Similar treatment is very effective in mild infections. Available are douches of many types and various drugs contained in jellylike bases. Normally, the vaginal pH ranges between 4.0 and 4.5. With this degree of acidity the squamous epithelium proliferates to replace the columnar epi-

thelium characteristic of ectropion. Consequently, acid douches, utilizing household vinegar, lactic acid or hexylresorcinal, should be prescribed. Vinegar is readily available, and 4 tablespoonfuls to 2 quarts of warm water is recommended. For the fussy impressionable patient, 1 teaspoonful of lactic acid USP to 2 quarts of warm water will produce the same results. Among the jellies which are effective are Triple-Sulfa, Aci-Jel, Westhiazole, and Allantomide. Their outstanding advantage is ease of use. Douching requires a certain privacy, unsightly equipment, and time. Jellies, on the other hand, are easily used, and many patients will carry on adequate treatment at home by this means when douches would be haphazardly taken, if taken at all. Local treatment by douches or jellies should be prescribed from one to three times daily, depending upon the severity of the infectious process; treatment at bedtime is most effective. Penicillin vaginal suppositories are available but have been disappointing in use. Tampon therapy, utilizing a wide variety of medicaments, usually hydropscopic in action, has been employed in the past but is of questionable effectiveness.

If the cervical involvement is unchanged with local and home treatment, cautery of the cervix is indicated. To avoid unsatisfactory results, certain contraindications should be kept in mind, a definite and meticulous technique followed, and after-care given until the lesion is cured (Table III). Cautery must never be utilized in the face of uncertain or equivocal diagnosis. When used in the presence of an acute cervical or pelvic inflammatory process, severe intrapelvic genital infection and peritonitis too frequently result. Uterine retroversions should be corrected before cautery. An unreplaceable retroversion often indicates the presence of chronic pelvic inflammatory disease. In many women retroversion produces a venous and lymphatic stasis which contributes importantly to intrapelvic spread of cervical infections. It is best to avoid cautery within a few days of the next expected menstrual flow because of the pelvic hyperemia which is present and because of the inability to evaluate properly bleeding which may follow. Cauterization of minimal non-neoplastic lesions should be avoided early in reproductive life. If these patients are followed carefully after a properly conducted delivery, the residual cervical lesions generally can be healed by patient local treatment. By such means cer-

TABLE III. CAUTERIZATION OF THE CERVIX

<b>A. Contraindications:</b>	
1.	Uncertain or equivocal diagnosis
2.	Acute cervical or pelvic inflammation, pyometra
3.	Unreplaced uterine retroversion
4.	Close to expected menses
5.	Minimal non-neoplastic lesion early in reproductive life
<b>B. Technique:</b>	
1.	Thorough bimanual and visual examination of internal and external genitalia
2.	Speculum to bring axis of cervical canal in continuity with vaginal axis
3.	Non-staining antiseptic to portio and external os
4.	Probe cervical canal for patency and stricture
5.	Radial cauterization—begin on posterior lip
	(a) Avoid endocervix
	(b) Depth depends upon pathology to be corrected
	(c) Destroy Nabothian cysts first
	(d) Better repeated cauterizations than one radically extensive
6.	Control bleeding
7.	Apply powder or jelly, insert tampon
<b>C. Instruct Regarding Home Care:</b>	
1.	Bleeding and discharge
2.	No intercourse
3.	Daily application of powder or jelly, with or without douches
<b>D. Follow-up Care:</b>	
1.	Office examination at least every two weeks until lesion is healed
2.	Bimanual examination with visual examination of cervix at each visit
3.	Probe or dilate canal at each examination
4.	Repeat biopsy
5.	Repeat cautery.

vical scarring is eliminated or reduced, so that subsequent lacerations at delivery are extremely minor in degree and stenosis of the endocervix is avoided.

A thorough bimanual examination, both vaginally and rectally, as well as careful visual examination of the genitalia, should be carried out even before preparations for cauterization are made. If no contraindications are present, the vaginal fornices and external os should be cleared of discharge. The cervical canal should be brought to lie in the same axis with the vagina to facilitate the use of the cautery electrode. This is most easily accomplished by using a tubular speculum which has the added advantage of protecting the sensitive vaginal mucosa from the heat of the cautery as well as from inadvertant burns. It is not necessary to use a tenaculum—actually it causes more difficulty by being in the way. A non-staining antiseptic applied to the portio and external os does not obscure the lesion to be treated.

Cautery destroys both healthy and infected tissue. Healing results from the replacing development of scar tissue. Cautery incision thus should be made in radial fashion, planned to utilize the resulting contracting scars in overcoming the eversion present. The depth of the cauterization will depend upon the extent of the lesion being treated, and may vary from 2 to 5 millimeters in depth. If no eversion is present, the cautery must be applied superficially only, or



stenosis of the canal may result. For the same reason the endocervix should be avoided. Control of the depth of the incision is best obtained by heating the electrode outside the canal to a cherry-red color and then applying it to the lesion. Nabothian cysts should be destroyed first and all mucus removed before radial incisions are made, since these areas will determine the location of the incisions. Because some bleeding usually results, it is best to begin the incisions on the posterior lip and at the lateral aspects to avoid obscuring the field. The incisions should never be closer than 0.5 centimeter, and generally five will treat adequately any cervical lesion. Best results are obtained by repeated light cauterization at monthly intervals rather than by radical and extensive cautery done at one visit because the repair process can be more accurately guided in correcting the lesion being treated. Bleeding which may be encountered can be controlled by light cauterization. After the cervix has been radially cauterized and bleeding controlled, a sulfonamide powder or one of the medicated vaginal jellies should be applied to the vaginal vault and cervix to absorb the resulting discharge. One should be certain to insert a dry vaginal tampon before completing the treatment to avoid the embarrassing discharge which occasionally occurs to the patient on her way home. The strings should emerge from the introitus so that it can be easily removed, which the patient is instructed to do on retiring that night.

It is important that the patient be given detailed instructions regarding treatment at home. She should be warned that within a day or two a copious discharge may develop, that there may be considerable bleeding after a week's time, and that occasionally some backache may become noticeable. If it is explained that these accompany the healing process, their appearance causes no apprehension. The bleeding which results from the separation of the superficial slough at from seven to ten days rarely is profuse. If there is no more than that accompanying a normal menstrual flow, there is no need for concern, but amounts in excess of this call for immediate examination. Intercourse is interdicted for at least three days, preferably until after the next office visit at two weeks. The use of a medicated vaginal jelly once or twice daily reduces the discharge and odor to tolerable proportions. Acid

douches help remove the debris and should be taken either in the morning or before the jelly is inserted.

For successful treatment by means of the actual cautery, continued follow-up care is essential. The patient should return to the office at least every two weeks until the lesion is healed. Again a complete pelvic examination should be done. The cervix must be visualized and the endocervical canal probed to insure its patency. If any tendency towards stenosis is found, dilatation should be done. At two weeks a sloughing cervix is found, with no extension of the original lesion. Occasionally excessive granulations may be present; these may be controlled by light cauterization. At three weeks the slough separates, and clean granulation tissue is seen, with beginning squamous epithelialization at the periphery. If the desired contraction is not being obtained or if some areas show residual infection, light radial cauterization may be performed. At five to six weeks the portio should be covered with glistening squamous epithelium, and the velvety red columnar epithelium should be seen only in the endocervix. If healing is incomplete at this time, either the diagnosis was in error and a second biopsy should be taken or the treatment was inadequate. Rarely are other complications encountered. Before the patient is discharged with the assurance that the cervical lesion has been eliminated, it is wise to do a thorough physical examination to discover other existing pathological processes. No female patient should ever be dismissed without the injunction to return every six months for an examination firmly placed in her mind.

In summary, lesions of the cervix uteri are of extremely common occurrence. These may be divided into four groups—developmental, traumatic; neoplastic, and infectious. Their proper management requires thorough examination to establish with absolute certainty the nature of the lesion. Biopsy should be done with the slightest suspicion or doubt. Simple persistent treatment will eliminate the majority of amenable lesions, while judicious use of the actual cautery will produce a cure in the remainder.

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# Good Psychiatry is Good Medicine

By C. Charles Burlingame, M.D.

Hartford, Connecticut



THERE ARE many brands of psychiatry, some of which have stemmed largely from a prevailing idea that the field of psychiatry must achieve what is called "the broader vision." As a result, some psychiatrists have entered into varied paths of human endeavor which are not strictly

medical—they have participated in peace conferences, assisted in the United Nations, discussed the devastating effect upon the emotions of the housing problem, of race prejudice, and so on. These efforts, which are undoubtedly interesting and important, may be classed as sociology, or social psychiatry, or something other than psychiatry *per se*. I do not decry any of them. Without a doubt, psychiatry can make a contribution to several disciplines, as can many of the other branches of medicine. However, particularly at this time, I am uneasy about anything that takes psychiatry *per se* away from being a medical specialty or takes psychiatrists as a group away from being physicians.

By its very nature, psychiatry is easy prey for charlatans, a target for loose-thinking, intermingling in the public mind with cultism, faith cures and metaphysics. Furthermore, the situation has been aggravated by the terminology peculiar to the field. Even many medical men entertain the opinion that psychiatry is something rare, strange and peculiar, and that in order to accomplish anything psychiatric, it is necessary to speak in psychiatric terms. All of this I do decry. After forty years in the field, I do not know anything about psychiatry that cannot be expressed in the ordinary medical terminology or the English language as they obtain. Actually, in applying psychiatric principles, other medical men have a wider opportunity than the psychiatrists will ever

have. In the broad contacts of the other specialties, there is a golden opportunity for *preventive* psychiatry.

Psychiatry is not mystical or frightening. It is merely the medical specialty devoted to emotional disorders, and after all, the emotional component in disease is neither new nor strange. We all know that the old-time general practitioners, and even the old-time surgeons, manipulated the emotions of their patients to the degree of compensating in a large measure for lesser medical knowledge and rudimentary equipment. Now doctors know more about disease. They have marvelous medical equipment. With the advent of modern medicine and scientific research, doctors learned a great deal about bacteria and pathological specimens—but they forgot the individual. And while we treat disease, we certainly cannot treat it with maximum success without treating the individual. Many times a week, in my own practice, I condemn the modern science of medicine where it has forgotten the individual and forsaken *the art of medical practice*.

Certainly we must not minimize the significance of Pasteur's discoveries and the other marvels evolving from somatic research, but we must also take full cognizance of the importance of the emotions, which were understood in a simple way by the old-time practitioner and are now contained in psychiatric principles.

I have been most disturbed at the extent to which some nonpsychiatric physicians have neglected these principles in their practice. During the recent period of emphasis on cancer, certain practitioners advocated complete frankness as the proper procedure in dealing with patients. Some of the results of this ultimatum, issued with no apparent concern for its psychological effects, are devastating. I know of one instance where a woman with cancer was visited by her gynecologist while her husband was out of the city. That gynecologist, subscribing to the straight-from-the-shoulder school, told her quite bluntly that she had cancer of the uterus and that there was general metastasis. Sparing her nothing, he further intoned that she would probably live no more than from three to six months longer. Then, being a very busy man, he marched off, leaving the patient to gather her wits, wandering about her home, bewildered and distraught. There her husband returned—in time to prevent her suicide!

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Dr. Burlingame is president and psychiatrist-in-chief, the Institute of Living, Hartford, Connecticut.



Such procedure may be scientifically accurate, but is it good medicine? It is not good psychiatry.

Without singling out gynecology, but only using it as an example, I call attention to the gynecologist who, after a brusque, impersonal examination, tells the patient, with no preparation or even reassurance, that (1) she has diseased tubes, (2) her ovaries and uterus must come out, but (3) she has enough children so she doesn't need them anyway! I have known any number of women patients whose personalities had been sharply and disturbingly changed, not by the removal of the ovaries and the uterus, but by the removal of a part of their ego that is indispensable to the emotional integrity. Furthermore, I have seen their somatic complaints disappear with no treatment other than repairing the emotional damage that had been done.

Even the psychology of a new denture is a delicate matter, commanding consideration and understanding and tact in dealing with the patient. I have known some dentists with great mechanical skill and scientific knowledge to have little or no success in supplying dentures. I have known other less brilliant dentists to have nothing but success. Time and again, it has been a question of their skill, or lack of skill, in helping the patient to accept the idea of total extraction and then to become accustomed to wearing the denture.

Along with modern medicine, modern industry forgot the importance of the emotions. When I became the first full-time psychiatrist in industry, at Cheney Brothers in 1915, industry had done a great deal in matching the employee to the job along physical and intellectual lines, and according to educational background and skills, but little attention was being paid to the emotions. Industrial management had forgotten the lesson of yesteryear. It had overlooked the wisdom of the old-time grocer who spoke not of "that strong, brilliant delivery man" but of "that willing boy." In his homely way, that grocer realized that in job adjustment the underlying determining factor is emotional—that the good delivery boy must be willing, or all of his other qualifications will be nullified. The productive worker must have the "will-to-do," or in modern scientific terms, he must have a "high interest level."

In studies conducted at Cheney Brothers, we established the fact that where interest level on the part of the workers was high, absenteeism and

sickness were at a minimum, and where interest level was low, the incidence of absenteeism and sickness was high.

Experiences during the last war established the relationship between interest level and pain, proving that where interest level is high, there is great tolerance to pain and discomfort. So it was that soldiers had their hands shot off on the battlefield, but felt no pain at all because their interest in survival was so intense. Later, however, when they were processed out of the army, had no job and no definite plans for the future, their interest level dropped, which was the explanation for a great many of the so-called "war neuroses."

I would like nothing better than to spend an evening with a group of physicians discussing what I consider a faulty premise in labelling as war neuroses those conditions that were, in reality, perfectly normal responses to the situations experienced by servicemen. If there is anything in the power of suggestion, we in medicine, and particularly in psychiatry, carry a great responsibility when and if we label a condition as a psychiatric disease.

But I have digressed. As another example of good psychiatry in good medicine, I might cite hypertension. I believe firmly that if there is the slightest tendency toward hypertension, it may be aggravated by a reduction in interest level, with a concentration upon unpleasant possibilities. Consider the patient with coronary disease who is told by his doctor that he must go straight to bed, do little or nothing at all for a time, and then take things gradually, very gradually, and he may—not will, but may—live five years. Rest in bed and momentary relief from responsibility may be indispensable, but the way it is accomplished may spell the difference between success or making a bad matter worse.

Such a warning or threat, whichever we might call it, was once given to a colleague and friend of mine. Even with his knowledge of medicine, he was left alarmed and tense, with an almost morbid fear of over-exerting. All of his movements became over-cautious. He had an anxious expression. And above all, his hypertension was increasing to the danger point. Finally, I said to him, "Relax, old man. You might as well be dead as practice at it!" Well, he lived for fourteen years after his attack, during which time he took things

much more easily than before; but I am sure that he lived longer because he realized, before it was too late, that all he was being asked to do was "to be his age," and to lead a reasonable and useful life.

I have tried to point out the fact that the emotions exert a profound effect upon the human being in sickness and in health, and further, that a high interest level is a powerful ally in all medical procedures.

Here I would like to mention the intrinsic value of merely giving patients the opportunity "to get things off their chest." Among my many experiences of this sort was one woman patient inclined toward hypertension who would occasionally come to us for a check-up and a chance to talk things over. During her brief visits, there was a fluctuation of 60 milligrams in her blood pressure, without the use of drugs or anything except helping and teaching her to meet her problems, which in her case were largely centered around her husband.

Of course, some practitioners wave aside those who advocate letting the patients "talk things over." They remind us that they must see at least twenty people between two and four in the afternoon, and, in plain English, they don't have time to listen to all their troubles! On the other hand, there are those doctors who want to know what they can tell their patients in the limited time they have.

As far as time is concerned, it is not always the all-important factor, because one hour with a patient may be completely ineffective, whereas two or three of the right sentences may be just what the patient needs—the right words are often as powerful as some of the pills we prescribe.

Beyond question, there are many cases that demand much time, and if the doctor does not have it, we psychiatrists urge not giving the patient the brushoff but sending him to someone who does have the time, as well as the ability, to help him. Otherwise, one of two things will happen. Either the patient will become a neurotic, making the rounds of all the doctors, or he will land in the laps of the charlatans. And if any physician is not familiar with the thriving business of charlatanry in this country, he should read "Where Do People Take Their Troubles?" by Lee Steiner.

Rather than devoting twenty minutes to writing a prescription, a doctor occasionally might bet-

ter reduce it to ten minutes, and spend the rest of the time helping to plan his patient's life. Not only the physical being, but the vocational life, the avocational sphere, and the social and recreational relationships may harbor a retarding factor in medical disability.

We sometimes marvel at the phenomenon of a young doctor, new in the community, who cures some patient whom none of the older, established doctors had been able to help. If those incidents were analyzed, we would usually find that the young doctor simply took the time to connect up some psychosomatic complaint that the other doctors had been too busy to unravel.

I do not particularly like the term psychosomatic medicine, about which we have been hearing so much these past few years. I would like to hear more about somatopsychic medicine. But whether psychosomatic or somatopsychic, it is nothing new. Even the ancients were familiar with psychosomatic principles, as is shown by a study of language, where from the ancient to the modern, we find expressions, particularly vulgar ones, indicating an innate appreciation for the body-mind relationships. "He has no intestinal fortitude" is so old it was probably written in hieroglyphics, and it only means that if a doctor had to pass difficult state board examinations tomorrow or lose his license forever, it might precipitate in him an emotional strain that would cause an upset stomach or even a loose intestinal tract. There are many other like sayings. For instance: "My heart's in my mouth." "It made her stomach turn over." "His hair stood on end."

In my experience, I have seen gastric upsets, backaches, headaches, and so on, that never would have occurred if it had not been for some underlying emotional disturbance. But so have each of you.

Hyperthyroidism, as another example, has been commonly accepted as calling for operative procedure, but we have now learned, beyond any shadow of a doubt, that limiting treatment to an operation alone is the major reason for unsatisfactory results, when such disappointments occur. It is evident that anyone sick enough to need an operation needs his emotional balance inquired into to assure good surgical results. Furthermore, in some cases, after helping the patient regain a good emotional balance, physicians have often found an operation to be unnecessary. This is no



pearl of wisdom discovered by me. It is a statement of fact which now comes from the "mouths" of the best surgical "hands" in thyroidectomy!

As always, there is the danger of going to the other extreme, of becoming so overwhelmed by the psychosomatic viewpoint that the physical aspect of disease is neglected, perhaps to the serious detriment of the patient. I know one young psychiatrist who became so entranced with the psychosomatic factors in diabetes that, in one case, he failed to prescribe the physical aid of insulin, and he lost his patient. She went into coma, out of which he brought her, but in spite of anything he could do then, she died. It goes without saying that physicians must maintain their equilibrium, neither treating the physical to the exclusion of the mental, nor the mental to the exclusion of the physical, because there is no such thing as a physical disease without a psychological recording, nor a mental disease without a physical recording.

There was a time when, to the best of medical knowledge, every disease was considered either as "physical" or "mental," but research has demolished that theory and torn down that barrier.

For illustrative purposes, I would describe disease as being graphed in a rectangle on which a line is drawn from the lower left hand corner to the upper right hand corner. We will imagine that psychological symptoms are all contained in the area above the line, while the somatic symptoms are in the space below the line.

In this rectangle of disease, we can delineate one segment through the middle that shows 50 per cent of its symptoms below the line, on the somatic side, and 50 per cent above the line, on the psychological side. In that particular segment, we might, for example, place general paresis, with its symptoms more or less 50 per cent somatic and 50 psychological. We can agree that this is a disease, but we certainly cannot label it either wholly physical or wholly mental.

Over to the right in the rectangle, we can draw a segment showing perhaps 90 per cent of the symptoms below the line, on the somatic side, and only 10 per cent above the line, on the psychological side. In this segment we might place the carbuncle. If anyone does not believe that a carbuncle should have any percentage above the line, on the psychological side, let him get one—and it will then be quite clear to him that, in ad-

dition to the physical symptoms, the discomfort and inconvenience of the carbuncle exert a definite effect on the personality!

Since medical men are well agreed that every disease has psychological components, every disease must be partly above the line, on the psychological side, at least to some degree. To my way of thinking, every disease must also be partly below the line, on the somatic side.

True, there is still a large group of psychiatric diseases in which we have not yet identified any somatic accompaniments. But just because the somatic accompaniments have not been identified does not mean that they are not there. I am fully convinced that with our ever-improving methods of physical diagnosis, time and effort will establish the scientific fact that there is no psychiatric disease without a somatic accompaniment.

Conclusive evidence to this effect is gradually, but continually, piling up. Remember, with our formerly limited knowledge, general paresis was thought by some to be wholly psychological. Now we know it is syphilis of the cortex of the brain. Involuntional melancholia was also thought to be wholly psychological. I am convinced that it is pretty well tied up with an endocrine imbalance.

Also, at the Nobel Institute in Stockholm, under the direction of Dr. T. Caspersson, important chemical differences are now being observed between the nerve cells in the frontal lobes of well persons and those of patients suffering from various so-called "mental" diseases, including the old "functional" standbys, schizophrenia and manic-depressive psychosis. I predict that, in the not too distant future, medical men will talk about, and study, and treat, not this "physical" disease and that "mental" disease, but just disease, from the physical and the emotional points of view.

Until recent years, the so-called mental diseases, the greatest of all public health problems, were simply accepted, like death and taxes, where people pay and die. Psychiatry, the medical specialty devoted to mental disease, is still suffering growing pains, still struggling to separate fact from fancy and to establish itself as an enduring, effective medical specialty. Therefore, in psychiatry more than in any other specialty, there is a demand for a housecleaning and a hardheaded differentiation between hypotheses and scientific fact.

On this basis, I decry certain present-day trends,

not the least of which is the close identification between psychiatry and sex. Rather than interpreting sex as including everything from spending a connubial night to leaning on a hitching post, psychiatrists might better adhere to the conventional dictionary definition. I disagree most heartily with those who would interpret sex as the whole of life and expand the definition accordingly.

A part, but only a part, of man is his creative urge, and in turn, only a part of his creative urge is his procreative urge. Expanding the definition of sex to a meaning distinctly different from that cannot possibly aid the exchange of knowledge between scientific disciplines, nor can it contribute to patient enlightenment.

In this connection, I also take exception to any dogmatic statement to the effect that sex, in accordance with its conventional definition, is always the strongest of all human emotions. Without being vulgar, we can each recall to mind instances wherein self-preservation of the individual's social standing transcended sex as it is conventionally understood. But discussion along this line is a separate subject in itself.

Another trend in psychiatry that needs practical clarification has to do with child psychiatry and its many and varied schools of thought, which run all the way from those subscribing to the theory that the child should be unfettered and completely free to "express himself" in any way he sees fit, to the school that advocates disciplinary measures and strict training in martinet fashion, such as the "do this, do that" technique. Here again, going to either extreme is obviously psychiatric nonsense. I also view with apprehension any technique that routinely interposes a psychiatrist or anyone else between the child and the parent, which offers the grave danger of increasing the child's conflict, or the parent's, or both.

I also take issue with the "love starvation" school, which propounds the theory that most, if not all, emotional troubles stem from the fact that the child's craving for love was never satisfied. Proponents of this school would have us running along dripping love all over the place until the child slips and fractures his future! Such irrationalizing must root in parents, and perhaps doctors, who take refuge in the love starvation theory because they are too lazy or too selfish to do sturdy thinking. It is always easier and a

bit more thrilling to be loved and liked, rather than disliked, even when the dislike is accompanied by respect.

Happily, the majority of psychiatrists deplore such psychiatric flights of fancy. In the demanding task of getting sick people well, they prefer keeping their feet on solid ground, with a grip on the core of valid scientific fact, rather than flaunting their wings in the rarified atmosphere of "psychiatric aviation."

Indeed, I am neither a pedantic philosopher nor a mystical sage who knows the secret of the inner workings of man's wonderful mind. I profess to hold no magic key to the door of mental and emotional mechanisms, about which, in fact, we in psychiatry still know very little that can be classed as unalterable scientific fact. But I do profess that we are on the way to fashioning the keys to the diagnosis and treatment of the psychological components of disease.

I have tried to show the basic medical groundwork that is being laid in the field of psychiatry by physicians who are dealing in scientific fact and hardheaded, realistic psychiatric philosophy. To solve the problem of mental diseases, we must (1) establish emotional disorders as diseases, and as such, a problem of medicine, and (2) establish psychiatry as an enduring medical specialty, working hand in hand with all other branches of medicine.

Increasingly, every medical man must be somewhat of a psychiatrist, as the surgeon must be somewhat of an internist, the dermatologist somewhat of a neurologist, and so on. The good old family physician of yesteryear helped his patient by allaying fears and anxieties, and encouraging him to face reality with courage and confidence, instead of escaping by attributing his weaknesses to factors over which he had, or has, no control.

Today such aid on the part of the medical profession is doubly needed, because so much stress has been placed on the emotions that many patients are interpreting their feelings as sickness, even when their reactions are perfectly normal under the existing circumstances.

I have spoken of the kind of psychiatry that will be seen and the kind that will be practiced. Now I will indulge in a confession of faith on what I believe the psychiatric specialist should know.

First, I believe that psychiatrists must use all of sound somatic medicine, all the scientific knowl-



edge of diagnosis and treatment that has been developed by all branches of medicine. As mental disease is not a thing apart from other diseases, neither can psychiatry function effectively without working closely with the other medical specialties and utilizing their experience and knowledge.

Secondly, psychiatrists must use all of the somatic adjuvants which have been developed primarily as an aid to our specialty, such as the shock therapies and now psychosurgery and certain of the chemotherapies. In the field of psychosurgery, in a few short years, we have moved far beyond the period of "ashcan selectivity," when we operated only on those patients who had nothing left to lose. The development of topecomy, the undercutting technique and the thalamotomy is being rapidly followed by a knowledge of which patients should be operated on and which left alone, which operative technique is indicated for which patient, and what results may be expected.

I might interpolate that the current happenings in psychosurgery leave me both comforted and alarmed. It would be a stupid person, indeed, who is not impressed with the near miracles occurring in our field through the avenues of psychosurgery, but these very miracles call for caution to avoid excess.

To return to my confession of faith on what a psychiatrist should know and use, I will say that, thirdly, we must use methods of rehabilitation and re-education. In other words, we must go about training our patients to live in society as it is now constituted, which means that the psychiatrist must forsake boondoggling for practical vocational training, avocational training, social and recreational training, and physical educational training on the basis that society will demand of the individual patient in the future.

Fourthly, psychiatrists must have a broad knowledge of psychotherapy and its several forms. I believe that psychotherapy, regardless of its form, is essentially personal tutoring. Part of the public, and some medical men, are under the misconception that psychotherapy and psychoanalysis are synonymous. Nothing could be farther from the truth, and I feel sure that the psychoanalysts would be the first to correct this erroneous idea. Even as psychotherapy is only one of the tools in the psychiatric armamentarium, so psychoanalysis is only one of the forms of psychotherapy.

There are many schools of thought in psychotherapy, but the important overall essential is for the therapist to learn how to use himself. Under all circumstances, the psychotherapist himself is his own best tool.

I hope that some recent publicity accidents, in which some psychiatrists have been cast in the role of warning the public against other psychiatrists with whom they differ, will not result in diminishing confidence in the psychiatric profession as a whole. It is undignified and most unfortunate for the different schools to attack one another in an effort to preempt the field. So much of psychiatry is still on a hypothetical basis that all schools of thought are needed in the interests of scientific advancement. Out of honest differences of opinion comes progress, and we bespeak tolerance for all psychotherapeutic schools while we advance in this most important department of our growth.

From what I have said, it is evident that I see two trends in psychiatry: one is away from medicine, and the other, which I hope is the enduring one, is more and more toward being an integral part of the medical profession.

Psychiatry is a new specialty. It can be an important specialty and a popular one, but to my mind, the essential thing is not whether psychiatry is new and important and popular, but whether or not we psychiatrists can walk side by side with gentlemen of science as the years go by, being increasingly entitled to call ourselves a branch of scientific medicine.

We are not universal specialists—heaven forbid! We are doctors of medicine who realize that the body is the vehicle of the mind, and we are seeking a better knowledge of the human body because it is the vehicle of the mind. But this we cannot do alone. Every man of medicine must join us in his daily striving to treat the person as well as the disease, in the full knowledge that man's emotions are the driving force that makes man man.

≡ MSMS

#### FROM THE PRESIDENT OF THE MINNESOTA STATE MEDICAL ASSOCIATION

The following is from the President's letter in *Minnesota Medicine* for June: "Do not ask what the American Medical Association or the Minnesota State Medical Association or your county society is doing about socialized medicine. Ask yourself what you are doing about it."

# Methyl Testosterone for Migraine of Women

By Robert C. Moehlig, M.D., and  
Robert A. Gerisch, M.D.

Detroit, Michigan



R. C. MOEHLIG

**I**N ADVOCATING the use of another remedy for migraine, one runs into the danger of adding just another drug to the long list of those placed into the discard. However, the use of methyl testosterone in thirty-five women was attended with such beneficial results and a feeling of well

being in the majority that this report is, in our opinion, justified.

In evaluating the benefits achieved in this disease by any drug, one is dependent upon the statements of the patient, but migraine patients do not, as a rule, say they are improved unless the headaches, which are so frequently debilitating, are actually better or have not returned.

This report is limited to adult females. We have, however, treated adolescent males with methyl testosterone with alleviation of symptoms.

## Dosage

Methyl testosterone was given in daily doses of 20 mg. This dose was continued in all patients for at least four weeks, but on an average of six weeks, at which time the daily dose was reduced to 10 mg.

Our experience showed that if the patient did not obtain relief within six weeks, there was no need to continue the treatment and no improvement could be expected. One of our thirty-nine-year-old patients continued to take 20 mg. daily for a period of two and one-half years. She had been told to discontinue the drug after three months, but because she obtained relief from her migraine, she refused to discontinue it. Her husband, being a pharmacist, continued to supply her with the product.

An interesting observation in this woman was the fact that her hair became darker and curly,

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so much so that she was asked by her friends whether she had frequent permanent waves. Another interesting observation was the enlargement of her muscles, particularly the biceps and calf muscles. No hirsutism nor voice change was noted. Her mental outlook was completely changed from one of irritability, depression and lack of ambition to one of calmness, cheerfulness and an increased ambition. This patient received the treatment over the longest period of time, and she never once experienced a return of the migraine.

## Undesirable Effects

It is important to stress the undesirable effects and reasons for caution in treating women with synthetic male hormone. Among the undesirable effects are:

*Hirsutism.*—The development of hair on the cheeks, chin, breast, arms, legs, and abdomen may be avoided if the patient is given 20 mg. daily and told to return in four weeks. Should there be any development of hirsutism, the dosage should be reduced to 10 mg. daily or discontinued for two to three weeks. Our experience has shown that seldom did any hair develop before the fourth week, and when it did occur it was found more frequently in brunettes. Caution must therefore be used in women who are already hirsute, since the drug accentuates the hirsutism. Women would rather have migraine than hirsutism.

*Voice Change.*—A change in voice to a deeper tone was experienced in only three women. This complication was usually encountered only after three to four months of therapy. Discontinuance produced a return of the voice to the normal pitch.

*Acne.*—Another effect which women do not like is the production of acne, very much like that seen in adolescent boys. The smaller dose, 10 mg. daily, usually resulted in a clearing up of this condition. Again, the vanity of women does not permit them to have acne, migraine being preferred.

*Muscular Aches.*—A minor complaint made by three patients was that of muscular aches in the arms, legs and chest. The discontinuance of the drug for a short period of two weeks resulted in clearing up of this symptom.

*Change in Menstrual Cycle.*—A change in the menstrual cycle was encountered only five times



in the thirty-five patients. This consisted of flowing twice a month, followed by a period of amenorrhea, which returned to normal within two months after the drug was discontinued. We found that the daily 10 mg. dose did not interfere with the normal menstrual cycle. Women as a rule do not object to this complication.

*Gain In Weight.*—A gain in weight is a frequent result of methyl testosterone therapy. This is, in some women who are already obese, an objectionable feature, but most of them are ready to pay this price for the relief of the headaches. Of course the asthenic built woman finds this a desirable feature. The increase in appetite is, as a rule, characteristic of the therapy.

*Nervousness and Irritability.*—Some patients who were on the 20 mg. dose for over six weeks complained of nervousness and irritability. Usually we discontinued the therapy for two weeks and resumed it with the 10 mg. dose, which did not cause this effect.

*Increase of Libido.*—Several patients volunteered the information that they had increased sexual desire, and among these were some who for the first time experienced orgasm. Needless to say, there were no objections to this symptom.

*Goiter.*—Patients with goiter should be watched carefully, for methyl testosterone increases metabolism, and thus a goiter may be activated or if already active the goiter symptoms will be accentuated. Testosterone should not be given to patients receiving iodine solution or thyroid substance.

*Diabetes mellitus.*—Patients with diabetes mellitus have an increase of their blood sugar if given methyl testosterone, so diabetics should not receive this drug. This also holds true of testosterone propionate given parenterally.

In noting the undesirable effects, the physician may feel that they outweigh the benefits. We can assure him, however, that with supervision of the dosage, and a reduction of the 20 mg. daily dose to 10 mg.—or discontinuance for a time—these side effects are not serious. Quite true, they affect women in those places which touch their beauty, but again we say that these effects are easily prevented and controlled by supervision of dosage.

## Comment

The beneficial results of methyl testosterone in these cases of migraine in women were gratifying. Not only did the patients express themselves as being grateful for the relief of headaches, but at the same time the feeling of well being, increased ambition, increased muscular strength and improved memory were additional beneficial features of the treatment. The patients stated that they concentrated better and had a feeling of well being. The criticism may be made that the results were psychic in origin, but the individuals were not told what was being used. Usually trade names were given in prescriptions. The cost is no greater than when the technical name, methyl testosterone, is used. It is well to inform the patient that the tablets are expensive; most pharmacists charge \$12.50 per hundred. Psychotherapy could not, we are certain, claim such uniform results as were obtained by methyl testosterone.

We are anxious to see how the results of others compare with ours. Of the thirty-five patients, four did not respond: in fact, one patient was made distinctly worse by methyl testosterone. This gives a percentage of 88.5 responding favorably. One of the four patients obtained relief of her headaches within two weeks, but she had such severe hot flashes and a feeling of heat all over her body that she had to discontinue the testosterone. She had had a complete hysterectomy for a uterine fibroid several months previously and, in addition, had a thyroid adenoma, a combination that one of us found in 63 per cent of 410 patients. The third failure was a woman of thirty-nine who obtained relief within a few weeks of therapy, but for some unknown reason, her physician increased the daily dose to 30 mg., which resulted in extreme nervousness and a return of headaches. The fourth patient obtained only slight alleviation of symptoms, but did have a feeling of well being. She did not obtain sufficient relief of her migraine and is considered a failure. It is of interest that her daughter who had had headaches for as long as she could remember had no recurrence in six months and enthusiastically referred her mother for treatment. Her son likewise has headaches, but he is just beginning treatment.

We appreciate the fact that thirty-five patients represent a small series, but the treatment produced such beneficial results in the majority and in such a short time that we feel that this form

of therapy has great promise. Certainly a larger series over a period of several years is necessary to evaluate the treatment.

### Diagnosis

A review of the literature shows that there is some divergence of opinion as to which and how many of the classical symptoms must be present to validate the diagnosis of migraine. By definition, migraine is a symptom complex occurring periodically and characterized by pain in the head, usually unilateral, and by vertigo, nausea and vomiting, photophobia and scintillating scotomata. Other symptoms associated with migraine are: vasomotor phenomena, such as paleness with vasoconstriction of the surface vessels, followed by perspiration and flushing of the face; polyuria; mental confusion and drowsiness; paresis of a temporary nature, involving one or two extremities, and tinnitus fairly frequently. A gastrointestinal type, in which there is a preponderance of gastrointestinal symptoms and a minimal cephalic phase, also occurs. Individuals with migraine are usually above average in intelligence, and there is a high incidence among professional people. It is well known, of course, that the incidence of familial history of migraine is universally high.

Of our thirty-five cases, twenty-eight were considered as typical of migraine, with a majority of cardinal symptoms being present. The seven patients not considered as having typical migraine had, however, persistent long-standing periodic headaches associated with a variety of the aforementioned symptoms, but they would not be classed as true migraine. The important point to be stressed, however, is that they all received relief from their headache by methyl testosterone. Some stated that within one week the headaches were alleviated and then gradually disappeared, but on the average two weeks of therapy were required before improvement was noted, that is, a decrease in the severity and number of attacks.

### Discussion

How long must treatment be continued? We have had one patient who has taken methyl testosterone for two and one half years in 10 mg. daily dose without any untoward effects. Another has had no return of headaches in two years, after being treated for three months. We have advised the discontinuance of the drug if relief was obtained after two months of therapy, and while it

is as yet too early to say whether there will be recurrences, we have at least ten patients who have had no recurrence. A few had mild recurrences—and we stress the word mild—but they were relieved by a resumption of therapy.

Naturally, it is important to determine how long these benefits will last, but so far with those patients who have received the drug over the longest period of time, the results have been most satisfactory.

As to how methyl testosterone produces its beneficial effects in migraine, we are not prepared to say. One can propose many speculative opinions, such as a change in the pituitary-hypothalamic functions.

It is of interest that when the effects of testosterone are compared with anterior pituitary extract injections in dogs, the results are in many ways similar. These are:

1. An increase in metabolism.
2. A lessening of sugar tolerance.
3. Long continued injections and administration of these substances activate a goiter.
4. Increase of hemopoiesis.
5. Increase in muscle mass and muscular strength.
6. Increase in bone activity with increase of alkaline phosphatase.
7. Amenorrhea in the female.
8. Retention of nitrogen, sodium, phosphorus and calcium.

Furthermore, from a familial constitutional standpoint it can be stated that the majority (seventy-five of 100 migraine patients) stem from families that are tall. In explanation of this, it was found that seventy-five of 100 patients had one or more members in the immediate family who were 72 inches or more in height. This does not mean that the migraine patients themselves are taller than normal, but in 75 per cent of the cases this is true of some members of the immediate family. This may mean that the constitutional background of tallness is of pituitary origin.

A change in the electrolytes of the blood may be a factor in the benefits achieved.

Regardless of how the results are accomplished, the patients herein reported feel so relieved and show such a marked improvement in personality factors that they are profuse in their praises of methyl testosterone therapy. The relief from distressing and debilitating headaches, the feeling of euphoria, a new outlook on life, increase of mus-



cular strength and improvement in memory are certainly gratifying to observe in contrast to our all too many patients who say, "I am no better, doctor."

Somewhat aside from its use in migraine, we would like to state that methyl testosterone has been extremely useful in cases of melancholia in general mental depressions which occur near and at the menopause.

We have also used it, with distinct benefit, in 10 mg. daily doses in boys who suffer from migraine. Here too emphasis is to be placed upon proper supervision of dosage and frequent contact with the patient through the parents. Needless to say, caution must be exercised in these young patients because of undesirable premature sexual development. We have not found it necessary to continue the dosage for over six weeks, and we have always interrupted treatment at this time.

### Summary

In thirty-five women suffering from migraine, the use of methyl testosterone was followed by relief in thirty-one patients, a percentage of 88.5. Of this number, twenty-eight were considered as suffering from typical migraine, usually with a familial history of migraine and the typical symptoms of the disease.

The initial dose was usually 20 mg. daily and was reduced to 10 mg. after four to six weeks. Experience showed that if relief was not obtained in six weeks, there was no need to continue beyond this point.

The improvement noted was not alone in relief of headaches but in a feeling of well being, increased ambition, increased muscular strength, improved memory, increased libido and a healthy mental outlook.

It has been emphasized that there are certain undesirable effects which call for caution and strict supervision of the treatment. Some of the undesirable effects which are particularly distressing in women are the masculinizing effects such as hirsutism, voice changes and acne. Women would rather have migraine than mar their beauty by using testosterone. Beside these undesirable cosmetic and masculinizing changes, the drug should be given with caution in patients with goiter or diabetes mellitus.

Despite the undesirable effects, which can be

guarded against by proper supervision, the benefits far outweigh the risk involved.

One patient has experienced no recurrence in two and a half years; another one has had no recurrence in two years.

We feel that methyl testosterone deserves a place in the treatment of women with migraine, but a larger series over a longer period of time will be necessary to evaluate the treatment. For the present we are enthusiastic about the short-term results.



## ARTERIOVENOUS SHUNTS

(Continued from Page 1012)

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## OLD AGE

Beauty is in the eye of the beholder, and age is in the mind of the aged. God has blessed us in that we never know when we are old. To the college boy, thirty-five is the age at which a man should retire from the dance floor and make room for a young man who can really dance. Fifty is aged to the junior partner who feels that old men of fifty should step aside and let young men of forty take over the business. Men of fifty feel that old chaps of sixty and seventy should go into the chimney corner and talk of the good old days, and get out of the way of young men of fifty.

No man ever feels that he has arrived at old age. Old age is like the pot of gold at the end of the rainbow. It recedes as we advance. It is always a little bit further along on life's pathway.—Editorial by Roe Fulkerson, *Kiwanis Magazine*, July, 1949.

# Rationale Therapy of Allergic Disease

By William Appel, M.D.  
Kalamazoo, Michigan

IN THIS PAPER the rationale of the following methods of therapy of allergic disease will be discussed very briefly: avoidance of offending allergens, desensitization, and symptomatic therapy. Since the rationale of therapy, however, depends on the pharmacologic basis for that therapy—or in the absence of a known pharmacologic basis, on the theoretical basis for therapy—I will very briefly review the pharmacologic and theoretical bases of therapy of allergic disease.

Though some of the manifestations of allergy\* cannot be explained by histamine alone, the histamine theory is at present the most valid working concept we have to explain allergic phenomena, and it has been definitely proven that histamine occupies a most important role in such phenomena.

The histamine concept may be expressed in the following way:

A. Antigen plus antibody on cell surfaces→histamine.

B. Histamine (in free form) at shock tissue→allergic reaction.†

Apparently what happens is that as a result of the union of antigen and antibody on the cell surfaces, cell damage and the dissolution of cell proteins, with the liberation of histamine, occur.

It has long been known that histamine is normally present in many body tissues, bound internally in the structure of the tissue, and in the bound form it does not cause allergic disease. It is the shift from the intracellular form of histamine to the extracellular or free form that is important in the production of the allergic reaction. Only when histamine can act on the shock tissue may the allergic reaction occur. It should be emphasized here that allergic disease is not just a local disease affecting the nose, bronchi or skin but a metabolic disease affecting the entire organism—growth, et cetera—and therapy is effective only

in so far as it aids the whole organism and not just the part.

## Avoiding the Offending Antigen

It is evident that the above reaction *A* cannot proceed in the absence of one of the factors, namely, the antigen itself; and so any measures which truly cause avoidance of the offending antigen will benefit the patient. Thus with an individual sensitive to house dust, freeing his room of dust benefits him. If he is sensitive to a particular pollen and he moves to an area free of that pollen, he is benefited. Any measures which produce an effective barrier between the patient and the antigen to which he is sensitive benefit him. Masks or nasal filters are very often not effective because they fail for one reason or another to maintain this barrier.

## Desensitization Therapy

In past years the theory was expressed, and has gained relatively widespread acceptance, that in the course of so-called desensitization therapy to a specific antigen, specific immune antibodies (so-called blocking antibodies) are produced to a degree sufficient to prevent or retard the allergic reaction. It has also been stated that in those individuals who, so to speak, "outgrow their allergy" the same process occurs—the production of blocking antibodies—but at a much slower rate than when specific desensitization therapy is used. There is good evidence that in the course of desensitization therapy antibodies are produced. There is as yet, however, no proof that there is a direct degree of correlation between the amount of blocking antibody and clinical immunity. While it is a known fact that desensitization therapy is of decided benefit to many persons, the exact mechanism to explain the beneficial results obtained has not been demonstrated adequately and is still not clear. This is not in any way intended to discourage the use of desensitization therapy where it is indicated, for that form of therapy remains the so-called specific therapy and affords the best results—aside from prophylaxis, i.e., avoidance of the offending antigen.

## Symptomatic Therapy

The efficacy of symptomatic therapy depends, of course, on a knowledge of the pathologic condition present and the pharmacologic properties of

\*Hypocoagulability of blood, and the temporary hypercoagulability which precedes it; leukopenia; changed sedimentation characteristics of red blood cells. Such conditions also as eczema and contact dermatitis, as well as the irreversible findings of periarteritis nodosa, are not so well explained as, e.g., urticaria and angioneuritic edema.

†Increased capillary permeability, stimulation of secretions, smooth muscle spasm.



the medication used to treat that pathologic condition. Thus, in bronchial asthma at least three pathologic changes may occur: (1) edema of bronchial mucosa, (2) constriction of bronchi and bronchospasm, and (3) production of tenacious, highly viscous mucus which plugs bronchioles.

*Epinephrine.*—By decreasing the swelling of the bronchial mucosa and by antagonizing the bronchoconstrictive effect of the overstimulated vagus nerve, epinephrine affords considerable relief. However, it does not afford much, if any, relief when the bronchioles are plugged with mucus. Because of the fact that epinephrine is a most excellent vasoconstrictor and because it stimulates the sympathetic nerve endings (and so has an effect antagonistic to that of vagal stimulation), epinephrine is of vast value in the palliative treatment of allergic disease.

*Ephedrine.*—The effect of ephedrine is similar to that of epinephrine, but it is valuable because its effect lasts longer and it may be given orally or applied locally (e.g., in nose drops in allergic rhinitis) whereas epinephrine is usually given by injection or inhalation. Various ephedrine-like drugs\*\* have been developed to eliminate some of the side effects of ephedrine but the pharmacologic basis for their use is the same as that of ephedrine or epinephrine.

*Isuprel.*—A sympathin-I†† mimetic drug, isuprel has relatively recently come into use. It has the inhibitory qualities of epinephrine without most of the excitatory qualities of that substance, though apparently it is not completely without these properties, for isuprel can produce tachycardia and palpitation.

*Aminophylline.*—This is of value in the treatment of bronchial asthma because it has a direct bronchodilating relaxing effect on bronchial muscle which has been constricted. Given intravenously; it is of great value in the severe prolonged attack in which bronchial constriction and spasm is present. It is dangerous, however, to give this drug rapidly intravenously. The lack of effect of aminophylline in the early acute attack of asthma is probably due to the fact that, in the early at-

tack, the underlying pathologic condition is edema of bronchiolar mucosa, and aminophylline is of little or no benefit for that type of abnormality.

*Iodides and Ammonium Chloride.*—These are of value when there is a thick tenacious mucus and bronchiolar plugging, since these drugs tend to thin the bronchial secretion. It is in this phase of the pathologic condition—i.e., bronchiolar or bronchial obstruction with mucus—that bronchoscopy may at times be a lifesaving procedure. Carbon dioxide (5 to 8 per cent) with oxygen is also an effective expectorant and is useful in status asthmaticus.

*The Parasympathetic Inhibitors.*—Belladonna, hyoscyamus, lobelia and stramonium, by themselves, do not appreciably benefit the allergic asthmatic patient, though theoretically the drying effect of atropine should be of value. However, it makes the mucus more viscous, and this is an undesirable feature. The parasympathetic inhibitors do seem to have, however, some synergistic action when combined with expectorant and vasoconstrictor drugs in the treatment of asthma.

Apomorphine, too, seems to enhance the effect of the iodides, and ipecac at times is of value because of its expectorant effect, though it has been used in the past to the point of producing emesis. It substitutes effective retching for ineffective coughing.

*Antihistaminic Drugs.*—There is evidence that the antihistaminic drugs do not prevent the release of free histamine but rather avert the effect of histamine by combining with the site of action of that drug, thus blocking the histamine from exerting its effect locally on the shock tissue. It is believed that, given prophylactically, the antihistaminic drugs block the histamine as described above, and, when given to relieve existing symptoms, displace histamine from the site it occupies. In those forms of allergic disease in which the antihistaminic drugs do not prevent the allergic reaction from proceeding, or fail to decrease its severity, it is fair to assume that there is some other mechanism involved or that the antihistaminic drugs fail to displace histamine from its site of action at the shock tissue. It should also be noted that the antihistaminic drugs exert some local anesthetic action and are cerebral depressants.

\*\*Pseudo-ephedrine, racephedrine, benzylphedrine, propadrine HCl, neosynephrine HCl, et cetera.

††Sympathin-I is a substance liberated in structures inhibited by sympathetic impulses.

*Ergotamine.*—Its beneficial effect in the treatment of that kind of migraine attributed to allergy is believed to be due to its vasoconstrictor effect on dilated cerebral vessels, but ergotamine seems to have no value in the treatment of other forms of allergic disease.

*Helium and Oxygen.*—Because helium has one-seventh the specific gravity of nitrogen, it saves respiratory effort when inhaled in an oxygen mixture, and it is at times of value in bronchial asthmatic attacks.

*Hypertonic Glucose.*—Possibly due to its osmotic effect which helps remove fluid from tissues, hypertonic glucose (50 to 100 c.c. of 50 per cent solution) at times gives relief to individuals with angioneurotic edema, persistent asthma or urticaria. In asthma, if aminophylline is added to the hypertonic glucose, the efficacy of each drug seems to be increased.

*Sedatives.*—These may benefit the allergic patient by diminishing the nervousness and sleeplessness which so often result when allergic phenomena occur. Likewise, in status asthmaticus the anesthetic effect of ether may be of value.

The use of morphine in asthma is to be strongly condemned. It should never be used, for it depresses the cough reflex so that patients cannot cough up the sticky sputum which blocks the bronchioles and is largely responsible for the symptoms of asthma; and, secondly, it depresses the respiratory center and increases the anoxemia in patients already suffering from oxygen want.

*Vaccines.*—There is not conclusive evidence that desensitization can be produced by therapy with bacterial vaccines, though respiratory vaccines may be of aid in preventing bronchitis. It is believed that any benefit in allergic disease resulting from vaccine therapy is on a nonspecific basis.

There is at present no conclusive proof that desensitization to histamine by histamine therapy can be accomplished; and even if this could be done, it might be an unwise procedure, for desensitization to such a widespread organic constituent as histamine could have far-reaching undesirable consequences.

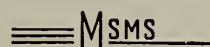
It should be pointed out that emotional disturbances can aggravate allergic symptoms as they

may other kinds of organic disease—e.g., coronary heart disease—and conversely, patients with allergic disease are perhaps more apt to be jittery and easily excited. It is not true, however, to say that emotional and nervous factors cause allergic disease. The antigen, wherever possible, should be sought out and appropriate therapy employed. An awareness that emotional disturbances can aggravate symptoms is important, however, so that common sense psychotherapy may be used where needed.

### Summary

In this paper an attempt has been made to state briefly the rationale of therapy of allergic disease, to give the pharmacologic basis wherever possible, or in the absence of known pharmacology, to describe the theoretical basis for the more widely used forms of therapy of allergic disease.

432 W. Academy Street



## SURGERY OF PORTAL HYPERTENSION

(Continued from Page 1010)

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# Mesenteric Vascular Occlusion

By R. E. Johnson, M.D.  
Flint, Michigan

**M**ESENTERIC vascular occlusion is a long-recognized but quite uncommon clinical entity. However, despite its infrequent occurrence, its dramatic qualities are such that each instance is long remembered. It is the purpose of this paper to review briefly the etiology and clinical picture of this disease and to present a case of unusual etiology.

The widely varied etiologies of this condition can perhaps be most expediently presented by means of the following outlines:

## *Etiology of Mesenteric Venous Occlusion (Warren and Eberhard)*

1. Known Infection—Including thrombophlebitis, appendicitis, pelvic abscesses, peritonitis, and general sepsis.
2. Hematogenous Causation—Blood dyscrasias or changes known to predispose to thrombosis, such as splenic anemia, and polycythema vera.
3. Traumatic—Trauma of any sort to the mesenteric vessels, tearing of the mesentery, and trauma from abdominal operations.
4. Mechanical—Largest group. Portal stasis, pressure from tumors, pressure from adhesions or congenital bands. Volvulus and strangulated hernias not included.

Subsequently, two fatal cases of superior mesenteric venous thrombosis have been reported following procaine blocks of the lumbar sympathetic chain, and one following surgical ablation of this chain. No attempt was made to explain the mechanism of these untoward happenings.

The causes of sudden occlusion of the mesenteric arteries are not dissimilar to those causing occlusion of any peripheral artery. The following outlines are adapted from those of Collens and Wilensky:

## *Etiological Classification of Mesenteric Arterial Occlusion*

- A. Embolism.
  1. Cardiac—Auricular fibrillation, myocardial infarct with mural thrombus, mitral and aortic valvulitis including that due to acute and subacute bacterial endocarditis, and a failing heart from any cause.

2. Arterial—Due to a mural thrombus arising from aneurysm, arteriosclerosis, trauma, or inflammation.
3. Venous—Via patent foramen ovale.
- B. Thrombosis.
  1. Inflammatory—Mycotic arteritis from any severe infection, and periarteritis nodosa.
  2. Degenerative—Arteriosclerosis.
  3. Traumatic—External trauma, surgical manipulation, gunshot and stab wounds.
  4. Simple—Heart disease, blood dyscrasias, volvulus, strangulated hernia and infectious diseases.

Although it is generally agreed that venous mesenteric occlusion is due to a thrombus, opinion is divided as to whether or not arterial mesenteric occlusion is predominantly embolic or thrombotic in origin. That occlusions of the superior mesenteric artery are more common than those of the inferior mesenteric artery is held by all to be due to its earlier exit from, and its more direct continuation of, the aorta. In general, it may be stated that the predominant causes of mesenteric occlusion in younger patients are heart disease and infection. In older patients, degenerative changes are the most important etiological agents.

The clinical picture of the condition is not definitely pathognomonic, and it is practically impossible to distinguish clinically between arterial and venous occlusion. Typically, one is confronted with an acute abdominal catastrophe most resembling intestinal obstruction, or strangulation or perforation of a viscus. Certain peculiar features are, however, usually present. The pain and shock are out of proportion to the rest of the findings. The pain overshadows the vomiting, whereas the reverse is true in ordinary upper intestinal obstruction. The physical examination varies as to degree of tenderness, rigidity, distention, and absence of peristaltic sounds. The abdomen is surprisingly much less tender than the degree of pain would lead one to expect. In general, there is no great constancy as to the location of pain and tenderness. Marked distention is infrequently present and rigidity is unusual. On occasion, an abdominal mass, due to thickened coils of intestine, may be palpated. Constipation is usually present. Blood per rectum is a helpful finding but is a very late occurrence. On occasion the vomitus may be bloody, tarry, or fecal in type. The finding on a plain film of the abdomen of ileus extending to the splenic flexure, and simulating a mechanical bowel obstruction in that area, has been reported

From Department of Internal Medicine, Hurley Hospital, Flint, Michigan.

in several cases of superior mesenteric thrombosis and has been suggested as a diagnostic aid.

### Case Report

A seventy-one-year-old white man was last admitted to the hospital with abdominal and chest pain.

During the three preceding years, the patient had had numerous admissions for what were diagnosed as myocardial infarctions. These were characterized by epigastric and retrosternal pain and dyspnea. On two occasions, electrocardiograms revealed definite anterior myocardial infarctions. Auricular fibrillation was present throughout. On one occasion the pulse was 36 and regular, and it was necessary to discontinue digitalis to effect recovery from the complete AV block. On the last previous admission, heart failure was present.

His chief complaint, on the final admission, was of a nonradiating pain in the right upper quadrant and right retrosternal area which had had its onset some three hours previously. The pain was constant, but there were paroxysms of moderate severity lasting five to ten minutes. There was no nausea or vomiting. There had been a normal stool the previous day.

Physical examination revealed a well-nourished, well-developed male who was dyspneic and perspiring but who was not cyanotic. There was cardiac hypertrophy. There was a regular rhythm with a rate of 40, due to a complete AV block from over-digitalization. Blood pressure was 130/80. The lungs were clear. The abdomen revealed no rigidity, spasm, or rebound tenderness. An appendectomy scar was present. No masses or solid organs were palpable. Slight tenderness was present in the right upper quadrant. Abdominal auscultation was thought to be normal. A rectal examination was negative. Radial and femoral pulses were bilaterally present and equal.

Some hours following admission, the patient's pain became worse, and he began to vomit repeatedly. This eventually subsided, and although not entirely free from the paroxysms of pain, he was improved to the extent that an electrocardiogram and chest x-ray were taken. Later, the pain and vomiting recurred and progressed in severity almost without interruption. He became dyspneic and perspired profusely. The pulse became rapid and irregular. He maintained a position on his right side with his knees flexed on the abdomen. There was marked tenderness in the right upper quadrant and epigastrium. There was no definite rigidity, although the patient voluntarily resisted palpation. There was no appreciable distention. Some bowel sounds were present.

A chest film showed cardiomegaly and emphysema. A flat plate of the abdomen revealed no free air, or ileus pattern suggesting a mechanical obstruction in the region of the splenic flexure. An electrocardiogram showed advanced heart damage and auricular fibrillation. The serology was negative. The serum amylase and urinalysis were within normal limits. The initial blood count was within normal limits; the final count revealed hemoglobin concentration and a leukocytosis of 34,900.

The patient gradually became worse. Abdominal findings did not change. There was no appreciable disten-

tion. Death occurred three days and eighteen hours following admission. There was only a slight temperature elevation. At no time was there blood found per rectum.

An autopsy was performed. The heart was found to be enlarged. Coronary sclerosis was present. There was no acute coronary occlusion; however, the scars of two old infarcts were present. No mural thrombus or valvular disease was evident. No gastric pathologic condition was found. The peritoneum was not greatly involved; there was very little ascitic fluid. The jejunum and ileum showed the reddish purple color changes of early gangrene; the remainder of the ileum was a bright red. The initial large bowel was also discolored.

In the abdominal aorta, just below the coeliac axis was a large mural thrombus, having its origin in an arteriosclerotic plaque and its free end embedded in, and completely occluding, the orifice of the superior mesenteric artery.

Although the above case was in many ways fairly representative of mesenteric arterial occlusion, there were several unusual features present. The site of the aortic thrombus was unusual in that their occurrence proximal to the superior mesenteric artery is rare. Due to its size and location, the thrombus did not produce the picture of occlusive disease in the lower extremities, so typical of aortic thrombosis. The complete occlusion of the base of the artery by such a mechanism is unusual, as in the intermittency of the symptoms.

Autopsy revealed no occlusions of individual peripheral branches of the superior mesenteric artery. In retrospect, one might postulate that the intermittency was due to a ball valve action by the body of the thrombus, as it lay free in the aortic current, producing transient anoxemia along the course of the superior mesenteric artery. The final picture presented when the thrombus became firmly embedded in the arterial orifice.

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# University of Michigan

## Postgraduate Courses

### CLINICAL EXERCISES FOR PRACTITIONERS

Wednesday, October 19 to December 14, 1949

January 4 to May 10, 1950.

10:00 a.m.-12:00 noon—Attendance at surgical ward rounds and surgical operations.

1:30 p.m.- 5:00 p.m.—Surgical exercises arranged especially for practitioners. These will include clinics, lectures, and demonstration in General Surgery and all the surgical specialties.

7:45 p.m.- 9:00 p.m.—Surgical Staff Conference in clinical amphitheatre.

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### CLINICAL INTERNAL MEDICINE

Thursdays, October 6 to December 15, 1949

January 5 to April 20, 1950

Arrangements have been made to meet the demands of practicing physicians for further training in internal medicine by offering a clinical teaching program every Thursday afternoon, beginning October 6 and continuing through December 15, 1949. The schedule will be resumed on January 5, 1950, and continued through April 20, 1950. Patients will be presented on ward rounds conducted by two members of the senior staff of the Department of Internal Medicine. The period will end with a conference of the entire medical staff and a review of recent interesting electrocardiograms.

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### PEDIATRICS

University Hospital

October 19-22, 1949

This postgraduate course in pediatrics is arranged for physicians who are especially interested in the field of pediatrics and communicable diseases. It includes a few lectures pertinent to special problems in pediatrics, but primarily it will consist of case presentations with discussions as to diagnosis and management of the special problems.

The faculty will include Doctor James L. Wilson and staff, and guest lecturers.

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### EXTRAMURAL PROGRAM

University of Michigan Department of Postgraduate Medicine

Autumn, 1949

The Michigan State Medical Society, in co-operation with the University of Michigan Medical School, Wayne University College of Medicine, and the Michigan Department of Health, announces the extramural postgraduate courses for the autumn, 1949.

<i>Centers</i>	<i>Dates</i>
Adrian .....	October 27
Alpena .....	October 27
Battle Creek.....	November 1
Bay City.....	October 26
Flint .....	October 25
Jackson .....	October 18
Lansing .....	November 29
Midland .....	November 18
Mt. Clemens.....	October 5 and November 2
Muskegon .....	November 2
Traverse City.....	October 13
Upper Peninsula:	
Escanaba .....	November 8 and 9
Houghton .....	November 10 and 11
Iron Mountain.....	November 9 and 10
Ironwood .....	November 10 and 11
Marquette .....	November 9 and 10
Menominee .....	November 8 and 9
Sault Ste. Marie.....	November 11 and 12

Printed Programs will be mailed to members of MSMS during September.

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Requests for information should be addressed to

HOWARD H. CUMMINGS, M.D., Chairman

Department of Postgraduate Medicine

University Hospital, Ann Arbor, Michigan

## To Improve People's Health

As one approaches the end of his administrative duties and reviews the events of his term of office, he quickly realizes he is but a small cog in a highly complicated machine.

I am sincerely appreciative of the assistance and advice of past and present officers of the Michigan State Medical Society, particularly from our two immediate past presidents, Wm. A. Hyland, M.D., and P. L. Ledwidge, M.D. Because one graduates to the rank of past president does not mean that he loses his interest in the affairs of organized medicine. I hope that I can emulate the continued accomplishments and activities of these two physicians and that my enthusiasm for our national and state societies will never be lessened.

In an organization such as the Michigan State Medical Society, with the many and varied problems confronting its administration, the work of the House of Delegates and of the fifty-four committees is of inestimable value. Their time-consuming study of details and implications of problems, and their decisions as to procedures, have proven of great aid to our Councilors and to the President in the activation of the most progressive program of any state medical society in the country. I wish to express my thanks and appreciation to the 298 committee members and the 121 delegates who are laboring so strenuously in the interest of Michigan Medicine.

No group of officers alone can run an organization. Information as to activities, programs and problems, and their activation on a local level depend upon the presidents, secretaries, and CAP committees of our fifty-five county and district medical societies. Upon these county officers rests the success of the entire State Society activities. Theirs is the job of continuous stimulation of all our members. They deserve much commendation for a superb accomplishment the past year.

It is a revelation to realize the amount of correspondence, attention to minutia and details, and the unceasing future planning that takes place in our executive office. Orchids are hereby tendered to Secretary L. Fernald Foster, M.D., Executive Director Bill Burns, Public Relations Counsel Hugh Brenneman, and the entire secretarial staff for their cheerful and prompt acceptance of work that we have loaded on their shoulders.

Truly, the Michigan State Medical Society is a great organization; all its members are vitally interested in its ultimate objective—the improvement of the health status of the people of Michigan.

*E. F. Sladek, M.D.*

President, Michigan State Medical Society

*President's*



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# Editorial

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## ROUND AND ROUND THEY GO

THE FOURTH ROUND of negotiations for increases of compensation to labor is now in progress. The leaders of labor announced last year that the emphasis for 1949 would be health, welfare, and social security benefits, with wages a minor consideration. As this is being written, conferences are now in progress with the automobile and steel industries. Labor demands certain benefits. They use the word "demand" rather than "request." Among these benefits are hospital service and medical service for not only the employe but also his family. They are also asking a rehabilitation program.

Labor officials are fearful of the catastrophies which result when serious illness strikes a family and many times wipes out reserves that have been accumulated or saddles the family with indebtedness which must be paid in the future because budgeting had not been done. They admit that a family can budget through the Blue Cross and Blue Shield prepayment plans and be quite secure, but if this is done voluntarily many neglect it. For this reason they have supported the compulsory system of service, the federal government program, in order to assure their people a measure of security. Labor leaders, however, are making every effort in their power to provide for health services under the voluntary plans so far as medicine is concerned. They are demanding that industry pay the premiums and make the coverage complete for all employes.

Labor's present demands of the automobile industry are similar to those secured in the Kaiser-Frazer contract—a contribution from industry of a fund which will be administered by a joint co-operation, four representatives of industry, four representatives of labor and a ninth impartial person to be selected by this group of eight persons. This Board of Control will administer the health and welfare fund for the benefit of all the labor. Under such a contract, Michigan Hospital Service and Michigan Medical Service are carrying the Kaiser-Frazer group. The Hospital Service has proven satisfactory. A recent survey of a large number of consecutive cases shows that the hospital bills were paid 96.9 per cent.

The Medical Service has not been so acceptable. The work done and the care given is not criticized but about 80 per cent of the bills rendered had an additional charge not entirely covered by the contract. And a careful study made by Kaiser-Frazer Control officials shows that the medical service paid 62 per cent of the total of all bills, leaving the worker to pay \$38 out of each \$100 of gross bills. The Union negotiators appreciate that this results from the fact that when our plans were set up, the \$2,500 income level was established, which covered 85 per cent of workers. The premium rates and payment rates to doctors were established on that basis. The income level has not been changed. The premium rates are the same as established in 1942, and the payments to the doctors have been increased only in some items. Payments for services have not been adjusted to the level of earnings of the workers, which is on the average someplace between \$3,100 and \$4,000. per year.

Under the medical service contract the doctor is entitled to readjust his fees, commensurate with what he would normally charge a person earning the higher amount. We think we can see, as an outcome of these present negotiations, a necessity for a revision of our contract or a new one which will carry a necessarily higher premium rate and higher compensation for the physician in many items. Labor officials admit this fact, but question the size of the premiums and demand that the new contract be a service affair, not an indemnity. Michigan Medical Service board members are studying this problem, but the members of the Michigan State Medical Society can help materially in ironing out health service difficulties if they will temper the extra charges submitted.

A few years ago the American Medical Association had an opportunity to confer with labor at the high level and make adjustments which would be advantageous and satisfactory to both parties. Labor is one of our greatest consumers and must be able to purchase the services they require. We use this word "purchase" judiciously because we believe that a proper understanding could remove from labor their urge for compulsory

socialized medical plans. We believe the way is open for a wise solution of much of the unrest which is forcing social evolution and foreboding the socialistic state.

In the matter of rehabilitation, labor interests demand a change. In the main they do not want an allowance of \$25 or \$35 per week for a man who has become incapacitated through industrial accidents, diseases or conditions. They are now asking that that man be rehabilitated so that he may earn his own living and re-enter industry.

## NATIONAL PLANNING

**I**NFORMATION is leaking out of political councils to the effect that the Administration forces, which are advocating socialized medicine, plan to make the 1950 political campaign a proving ground. Five states are to be selected where the candidates are outspoken advocates of the compulsory national health program of Truman, Ewing, Murray, Pepper, Falk, et al. The whole force of bureaucratic and other machinery will be concentrated in these five states. If the socialized medicine candidates win, the drive will be on throughout the nation. If they are defeated, nobody knows what the next step will be. Until the American people can be thoroughly taught, and convinced that we do not want state socialism nor any part of it (and socialized medicine is a part of it) this threat will be ever present and we in medicine must be prepared to continue America's fight for personal independence.

## BEWARE—AND REMEMBER

**D**OCTORS are beginning to think that the fight to prevent socialized medicine has been won, and that we may now relax. Congress seems to have arrived at a point where it is hesitant to pass any mammoth tax-supported measure. Its members are in large numbers telling us the threat is not immediate. As unsuspecting doctors we are glad to accept the notion and congratulate ourselves for a job well done.

That is just the attitude the socializers have hoped we would take. Their job is just so much easier. We, as a profession, are inclined to and wish to believe that the threat is getting less acute, and we will have ample time to get at work again when and if the occasion arises. Senator Vandenberg told us over a year ago that the

socializers could enact a calamitous law in very short order if they decided to do so.

Those of us who served during and after the first World War will have no difficulty in remembering what happened to veterans benefits in the 73rd Congress. Veterans Hospitals and Veterans Administration had been established to care for the injured or ill veteran whose disability was service connected. That is a traditional benefit veterans have had during all the history of our country, and no questions were asked. During the years just following the war it had become custom that a veteran whose disability was not "service connected" could be cared for in the veterans hospitals if beds were available. Some complaint and criticism arose, but mostly this situation was accepted.

A wave of economy struck in 1933, and Public Law 2 of the 73rd Congress was *passed within one day, without hearing and no notice given to veterans* who would be most vitally affected. Veterans whose service connection had not been accepted were thrown out of the hospitals by the thousands, with no place to go. And that was not the worst. An Executive order was issued canceling the service-connection files of all veterans who were getting disability benefits, and they were ordered to re-establish the proof of their service connection. This was fifteen years after the close of the war, and this effort became an almost unsurmountable one for thousands. It took years to partially correct this one day's legislative work.

With the experience of the veterans a few years ago, it is not safe to ignore sudden semi-secret action which might take place in Washington, depriving the medical profession of its independent status and throwing upon us the burden of reversing a policy which might be adopted. The doctors in England are now struggling against a social movement which is almost irreversible. If the same thing happened in America our fight would be long and very much up hill because so-called social reforms, once adopted, are almost permanent. Medical men should know that it is much easier and safer to prevent than correct.

## BLUE SHIELD AND THE AMERICAN MEDICAL ASSOCIATION

**O**N JUNE 23, 1948, the House of Delegates of the American Medical Association instructed its officers to secure Blue Cross-Blue Shield cov-



erage for the American Medical Association headquarters employees. That was not done. Resolutions were presented at the June, 1949, meeting and the following action was taken:

Resolution on Blue Shield Coverage of American Medical Association Employees: Your reference committee has found that the plan employed for servicing the employees of the American Medical Association is one of several approved by the Illinois State Medical Society. While this plan is not a Blue Shield plan, it was recommended to the Board of Trustees by a committee of the employees after due consideration. There has been no evidence presented to your committee of any dissatisfaction among the employees affected. Your committee believes that in a choice between two approved plans the decision of the local parties involved should be upheld. It further believes that every sincere effort was made to carry out the directive of the House of Delegates. It therefore recommends that the House of Delegates hereby **RESCIND ITS ACTION** of June 23, 1948, wherein it said: "Your committee recommends because of the above stated opinions that at the expiration of the present contract of hospital and medical health coverage, the American Medical Association, through its proper officials, make every sincere effort to procure this coverage for its employees through Blue Cross-Blue Shield local organization. Your committee understands that this coverage is and will be available by substituting for the words 'Blue Cross-Blue Shield local organization' the words 'any approved voluntary health insurance plan.'"

On June 9, 1949, further action was as follows:

"Supplementary Report of Council on Medical Service (a) Approve Complete and Absolute Separation of A.M.C.P. from A.M.A.: Your reference committee recommends that we approve complete and absolute separation of A.M.C.P. from the American Medical Association, and that we adopt the joint statement of the Board of Trustees and the Council on Medical Service as printed in the Handbook. Your committee approves this and recommends that you approve it."

Blue Shield, which is the doctors' program for prepaid medical service, has grown up. The program was started at the state and county level throughout the nation and has proved unbelievably successful in spite of begrudging support from the national headquarters. In fact the contacts from national headquarters have, at many stages, proven a hindrance rather than a help. We believe the associated medical care plans are to be congratulated upon this present action of the House of Delegates. Now, they will be permitted to grow and to supply the demands of our public with supervision from the state level where understanding and sympathetic co-operation are prevalent.

## GRAND RAPIDS

**T**HE SESSION of the Michigan State Medical Society for September 20-24, 1949, will be held in the city of Grand Rapids.

Grand Rapids was founded as an Indian Trading Post in 1826 and has become one of our metropolitan areas. A feature which is almost unique is the arrangement for conventions, the Civic Auditorium with its spacious meeting halls and its underground connection with the hotel in case of inclement weather. The auditorium will seat 5,000 persons and at its north end is a stage, 98 feet wide and 36 feet deep, completely equipped with scenery props, full-size switchboard and footlights. There is an orchestra lift which can lift a full symphony orchestra from the basement to the stage. The auxiliary auditorium, the Black and Silver Room, is very beautiful and will seat 800 persons. Complete voice amplification is provided, also air cooling by which the temperature can be regulated to 70 degrees.

The exhibit space is 44,000 square feet. For recreation in connection with the sessions, there are several country clubs — Blythefield, Cascade Hills, Green Ridge, Highland and Kent; also municipal and other popular places such as Grace Field, Indian Hills, and Ridgmoor. There are 250 lakes and trout streams for fishing and boating within an hour's drive of Grand Rapids. The city is located on four main railroads and numerous state highways.

We are anticipating a record-breaking meeting for 1949!



BLYTHEFIELD SWIMMING POOL

# Who's Who in MSMS

Roy Herbert Holmes, M.D., Editor, 1940-1942

An outstanding career as editor of a medical journal was cut short by World War II as Roy Herbert Holmes, M.D., Muskegon physician, turned in his "blue pencil" for the uniform of a medical officer in the Army of the United States.

Dr. Holmes, the seventh editor of *THE JOURNAL*, ascended the editor's chair following Dr. James H. Dempster of Detroit. From January, 1940 until mid-October of 1942 he served the medical profession well as *THE JOURNAL* continued its rise to a position of prominence in the medical publication field.

The career of the Muskegon physician-editor began in Grand Rapids in 1896. He gained his pre-medical education at Kalamazoo College and the University of Michigan College of Liberal Arts. He received his Degree in Medicine from the University of Michigan Medical School. Post-graduate work in dermatology included study periods at both New York Skin and Cancer Clinic and the Cook County Graduate Medical College.

Dr. Holmes is affiliated with the American College of Surgeons, American Industrial Physicians and Surgeons, Michigan Industrial Physicians and Surgeons, American Academy of Dermatology and the Detroit Dermatology Society.

In addition to serving as editor of *THE JOURNAL*, Dr. Holmes served two terms as Councilor of the MSMS from the Eleventh District and has been a Delegate to The House of Delegates of the MSMS.

Dr. Holmes was commissioned Major in the Medical Corps, A.U.S., August 22, 1942, and served as Dermatologist and in various other medical assignments at Camp Hulen, Texas. He completed the course in Tropical Medicine at the Army Medical School in Washington, D. C., in 1943, and was reassigned to Camp Hulen where he was Camp Medical Inspector and Venereal Disease Control Officer until a change of station was effected. In 1944 he was assigned as Dermatologist in the Regional Hospital in Camp Polk, Louisiana, and later at Camp Bowie, Texas. In



ROY HERBERT HOLMES

1945 he was retired and returned to Muskegon. In November of that year he resumed the private practice of dermatology in that city. At present Dr. Holmes is a member of the Reserve Officers Association. Other civic duties include active membership in the American Legion and Muskegon Chamber of Commerce.

The long hours spent by Dr. Holmes during his tenure as editor will long be remembered by the members of the Michigan State Medical Society. Under his active guidance, *THE JOURNAL* chronicled the medical and socio-economic events of the day. It was his foresight, intuition and way with words that stamped the publication as one well worth reading. He championed those causes which meant advances for Medicine while he zealously fought off the attempts to injure and degrade the profession to which he had dedicated his life.

The Michigan State Medical Society will forever be grateful for the time and effort expended by Dr. Roy Herbert Holmes to make *THE JOURNAL* MSMS one of *THE* top medical journals in our land.



# Help Break the Registration Record

Records are made to be broken—and with this thought in mind the Michigan State Medical Society is out to smash all registration figures for its Annual Sessions to be held in Grand Rapids. Pointing to the most outstanding array of medical speakers and teachers ever to appear on a Michigan State Medical Society platform and to the complete convention facilities offered by Grand Rapids, the officers of the Society feel certain that the 1947 attendance total of 2,110 doctors will be surpassed this fall by several hundreds.

plete with medical GREATS from more than fifteen states. Outstanding teachers and clinicians from the nation's largest and finest medical schools will share their discoveries of the past twelve months with those who are serving in the field. A glance at the program as printed elsewhere in *THE JOURNAL* will show that attendance at Grand Rapids is a "must" for the progressive doctor of medicine. Nothing but profit lies ahead.

In addition to the formal lectures, the exhibits this year will be the largest and finest ever pre-



"HOUSE OF FRIENDSHIP"—MANNED BY MSMS OFFICERS

Significant, too, is the fact that Michigan's physicians and surgeons, now intensely and devotedly engaged in a battle to stem the socialization of their profession, will take time from this fight to meet in a four-day Post-Graduate Session in order that their services may be all the more valuable to the patients they serve.

At the 1949 Michigan State Medical Society Session, the medical profession of this state will hear and see the newest in medical and surgical techniques. Michigan's doctors will listen and ask questions; they will view new apparatus and equipment; all this will result in better trained and better informed healthmen for the people of Michigan.

The program for the 84th Annual Session is re-

sented. The scientific and technical exhibitors will portray the latest in medical development. A trip through the exhibits will take the place of several hundred salesmen's calls.

The finest all-round program ever presented at any of the Annual Sessions should certainly stimulate you and you—the doctors of medicine in a state that is pointing the way to other states—to register for the 84th Annual Session and Post-Graduate Conference to be held this September 21-22-23-24 in Grand Rapids. Every doctor who registers will be helping to set a new attendance record—a record which will testify to the sincerity and devotion to duty of Michigan's men of medicine, and to their unquenchable thirst for more education and improvement in their profession.

# The 84th Annual Session and Postgraduate Conference and Cancer Control Day

Pantlind Hotel-Civic Auditorium, Grand Rapids,  
September 21-22-23-24, 1949

## ANNUAL SESSION INFORMATION

### DIRECTORY

Headquarters—Pantlind Hotel—Civic Auditorium, Grand Rapids

Registration—Civic Auditorium

MSMS House of Friendship—Civic Auditorium, opposite Registration Desk

General Assemblies—Black and Silver Ballroom, Civic Auditorium

Exhibits—Civic Auditorium, Exhibit Hall.

Press Room—Parlor F, Civic Auditorium

Woman's Auxiliary Headquarters—Pantlind Hotel

\* \* \*

◆ Register—Civic Auditorium, Grand Rapids—as soon as you arrive.

Hours: Tuesday, September 20—1:00 to 5:00 p.m.  
Wednesday, September 21—7:30 to 5:00 p.m.  
Thursday, September 22—8:30 to 5:00 p.m.  
Friday, September 23—8:30 to 3:30 p.m.

NO REGISTRATION FEE FOR AMA AND CANADIAN MA MEMBERS.

Admission will be by badge only to all Scientific Assemblies and Section Meetings.

Bring your MSMS or CMA Membership Card to expedite registration.

\* \* \*

◆ GUESTS—Members of the American Medical Association from any state, or from a province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Please present credentials at the Registration Desk.

Bona fide doctors of medicine serving as interns, residents, or who are associate or probationary members of county medical societies, if vouched for by an MSMS Councilor or the president or secretary of a county medical society, will be registered as guests. Please present credentials at the Registration Desk.

\* \* \*

◆ MICHIGAN DOCTORS OF MEDICINE, not members, if listed in the American Medical Directory, may register as guests upon payment of \$5.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1949 ONLY, provided they subsequently are accepted as members by their County Medical Society.

\* \* \*

◆ DOCTORS, register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1949 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians

may avoid waiting in line Wednesday morning before the opening General Assembly.

We recommend to Grand Rapids physicians—and those who arrive in Grand Rapids on Tuesday—that they register Tuesday, September 20, from 1:00 to 5:00 p.m., Civic Auditorium, Grand Rapids.

\* \* \*

◆ TELEPHONE SERVICE—Local and Long Distance telephone service will be available at entrance to Black and Silver Ballroom in the Civic Auditorium, as well as in the Pantlind Hotel. In case of emergency, doctors will be paged from the meetings by announcement on the screen. During meetings call 9-1313, 9-1156, 9-1751. At other hours, call the Pantlind Hotel, 9-7201, or the Registration Desk in the Exhibit Hall, Civic Auditorium, 9-1145.

\* \* \*

◆ GUEST ESSAYISTS are very respectfully requested not to change time of their lecture with another speaker without the approval of the General Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

\* \* \*

◆ THE MSMS "HOUSE OF FRIENDSHIP" will be located opposite the Registration Desk in the Civic Auditorium. All members are invited to stop at the "House of Friendship" and chat with the MSMS officers who will man the House at all times.

\* \* \*

◆ STATE SOCIETY NIGHT—Thursday, September 22, 1949, 10:30 p.m. Cabaret-style dance and entertainment for all who register and their ladies. Ballroom, Pantlind Hotel, Grand Rapids.

Program of the floor show:

- \* DeForest Poole's rhythmic orchestra
- \* Jack Herbert, M.C. and amazing magic
- \* Dennis and Darlene, songsters in the modern style
- \* King and Zorita, astonishing readers of the mind.

### PAPERS WILL BEGIN AND END ON TIME

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all the speakers will be required to begin their papers exactly on time and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper.



◆ **"UBIQUITOUS HOSTS"**—The following Grand Rapids doctors of medicine have placed themselves at the disposal of the twenty-eight visiting guest essayists who are on the program of the 84th Annual Session in Grand Rapids; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the United States: N. L. Avery, Jr., M.D., Gordon W. Balyeat, M.D., Carl B. Beeman, M.D., Donald Boersma, M.D., Leon C. Bosch, M.D., Wm. J. Butler, M.D., Luther C. Carpenter, M.D., David B. Davis, M.D., Joe DePree, M.D., Robert H. Denham, M.D., Leon DeVel, M.D., Mark W. Dick, M.D., George T. R. Fahlund, M.D., Lynn A. Ferguson, M.D., J. Donald Flynn, M.D., D. R. Heetderks, M.D., A. M. Hill, M.D., John T. Hodgen, M.D., W. A. Hyland, M.D., Horace C. Jones, M.D., Richard H. Meade, Jr., M.D., L. Paul Ralph, M.D., Richard A. Rasmussen, M.D., D. M. Schuitema, M.D., E. F. Sladek, M.D. (Traverse City), Paul W. Willits, M.D., Ray Vander Meer, M.D., and Paul A. VanPernis, M.D.

Sincere thanks are extended these hosts for their tangible help in making the MSMS Annual Session of 1949 an outstanding success.

\* \* \*

◆ **PUBLIC MEETING**—The evening assembly of Wednesday, September 21, 1949—Officers Night—will be open to the public. Invite your patients and other friends to this interesting meeting. The program (complete on Page 1047) is highlighted by:

8:30 p.m. President's Address  
Induction of President-Elect  
10:00 p.m. Biddle Lecture

\* \* \*

◆ **TRANSPORTATION**—The C. & O. Streamliners afford a convenient means of transportation to the MSMS Annual Session in Grand Rapids for hundreds of physicians in the central and southeastern part of the State. Order reservations well in advance.

\* \* \*

◆ **THE ANNUAL COMMITTEE ORGANIZATION** luncheon, a meeting of the MSMS committee chairmen appointed by President-elect W. E. Barstow, M.D., St. Louis, to serve during the year 1949-50, will be held on Thursday, September 22, at 12:00 noon in Rooms 322-324 of the Pantlind Hotel.

\* \* \*

◆ **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 19, at 10:00 a.m., Ballroom, Pantlind Hotel; it will hold two meetings on Monday, September 19, at 10:00 a.m. and at 8:00 p.m.; also two meetings on Tuesday, September 20, at 10:00 a.m. and at 8:00 p.m. **PRE-REGISTRATION OF DELEGATES WILL BE HELD SUNDAY, SEPTEMBER 18 FROM 8:00 TO 10:00 P.M. PLEASE REGISTER IN ADVANCE, TO SPARE YOURSELF STANDING IN LINE MONDAY MORNING.**

\* \* \*

◆ **TECHNICAL EXHIBITS**—132 spaces—will open daily at 8:30 a.m. and close at 5:30 p.m. Frequent intermissions to view the exhibits have been arranged before, during, and after the General Assemblies.

**PLEASE REGISTER AT EACH BOOTH.**

\* \* \*

◆ **SUBSCRIPTION LUNCHEONS**—Section Meetings, Wednesday, Thursday, Friday, September 21-22-23, Pantlind Hotel, 12:15 to 1:30 p.m., with a thirty-minute scientific address following each luncheon.

See Program, Pages 1046, 1049, 1053.

**THE WOMAN'S AUXILIARY TO THE MICHIGAN STATE MEDICAL SOCIETY** will present an attractive social and business program at the Pantlind Hotel, Grand Rapids, to which the wife of every MSMS, AMA and CMA member is cordially invited.

Woman's Auxiliary courtesy rooms, available Tuesday-Wednesday-Thursday-Friday, will be Parlors A and B on the Mezzanine of the Pantlind Hotel.

◆ **SIX ASSEMBLIES AND ONE GENERAL MEETING**, Wednesday, Thursday, Friday, September 21-22-23 (see Pages 1045-1054).

\* \* \*

◆ **INFORM YOUR NEWSPAPER EDITOR** that you are attending the Michigan State Medical Society Annual Session and Postgraduate Conference in Grand Rapids on September 21-23.

\* \* \*

◆ **INCOME TAX DEDUCTION**—Expenses incurred in attending conventions of professional societies have consistently been held deductible in the income tax returns of doctors, both in the United States and Canada. Certificates of attendance available upon request to 2020 Olds Tower, Lansing 8, Michigan.

\* \* \*

◆ **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan State Medical Society Annual Session and at the Cancer Control Day.

\* \* \*

◆ **THE KENT COUNTY MEDICAL SOCIETY HOSPITALITY BOOTH** will be located in the lobby of the Pantlind Hotel.

\* \* \*

◆ **MSMS SPEAKERS BUREAU CONFERENCE**, Thursday, September 22, 5:00 to 10:30 p.m. in the Schubert Room, Pantlind Hotel. Moderator: Paul D. Bagwell of Michigan State College, East Lansing, Michigan.

## TWENTY DISCUSSION CONFERENCES

These quiz periods will be held Wednesday and Thursday, September 21-22, at 5:00 to 6:00 p.m. and on Friday, September 23, at 4:30 to 5:30 p.m. An opportunity to ask questions concerning the presentation of the guest essayist, or to discuss one of your interesting cases with them, will be provided.

**WEDNESDAY:** Discussion Conferences on Surgery, Medicine, Anesthesiology, Dermatology, Obstetrics, Pediatrics and General Practice.

**THURSDAY:** Discussion Conferences on Obstetrics and Gynecology, Otolaryngology, Public Health and Preventive Medicine, Surgery, Medicine, and Ophthalmology.

**FRIDAY:** Discussion Conferences on Medicine, Syphilology, General Practice, Nervous and Mental Diseases, Surgery, Pediatrics and Radiology.

# ♦ MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

1. The Michigan Academy of General Practice will hold its second Annual Meeting, Thursday, September 22, at 8:00 p.m. in the Furniture Club, Pantlind Hotel. After the business meeting and election of officers, a reception honoring national AAGP President E. C. Texter, M.D., Detroit, will be held.
2. The Michigan Chapter of the American College of Chest Physicians will hold a dinner-meeting on Thursday, September 22, at 6:00 p.m. in Room 322, Pantlind Hotel. George W. Wright, M.D., Saranac Lake, N. Y., will talk on "Physiology of Pneumoconiosis." All members of the Michigan State Medical Society are cordially invited.
3. The Michigan Neuro-Psychiatric Association will hold a dinner-meeting on Friday, September 23, at 7:00 p.m. in The Schubert Room, Pantlind Hotel. The Program will feature R. W. Waggoner, M.D., Ann Arbor, Professor of Psychiatry, University of Michigan, who will discuss "Antabuse," the new drug in the treatment of alcoholism; Russell N. DeJong, M.D., Ann Arbor, Associate Professor of Neurology, University of Michigan, who will speak on "Newer Drugs in the Treatment of Extrapyr-midal Diseases"; and Willard W. Dickerson, M.D., Caro, who will discuss "Newer Drugs in the Treatment of Convulsive Disorders." Franklin G. Ebaugh, M.D. of Denver, Assembly speaker at the MSMS Annual Session, has been invited to participate in the discussions of the Michigan Neuropsychiatric Association.
4. The Detroit Proctologic Society will meet on Thursday, September 22, in Room 222, Pantlind Hotel. Dinner at 6:00 p.m. followed by a short business session at 7:00 p.m. at which time the Michigan Proctologic Society will be formed. Louis J. Hirschman, M.D., Detroit, will report on the newly formed American Board of Proctology. Dr. Hirschman's presentation will be followed by three 15-minute scientific papers, presented by members of the Society.
5. Michigan Medical Service membership will meet for luncheon on Tuesday, September 20, at 1:00 p.m. in the Schubert Room, Pantlind Hotel, Grand Rapids, followed by a meeting at 2:00 p.m. in the Ballroom, Pantlind Hotel.
6. Loyola University Alumni dinner-meeting is scheduled for Thursday, September 22, 6:30 p.m. in Room 327, Pantlind Hotel. Wives of Alumni cordially invited.
7. The Michigan Diabetes Association meets for dinner on Wednesday, September 21, at 6:00 p.m. in Room 322 of the Pantlind Hotel.
8. Wayne University Alumni Association will hold open-house in Parlor D of the Pantlind Hotel on Wednesday, Thursday, Friday, September 21-22-23, all day and evening. The Wayne University Medical College Alumni dinner will be held Wednesday, September 21, at 6:30 p.m., Room 328, Pantlind Hotel. John F. Failing, Grand Rapids, is chairman of arrangements.
9. Detroit Ophthalmological Society will meet for dinner on Thursday, September 22, at 6:30 p.m. in the Sadler Lounge, Pantlind Hotel.
10. The Michigan Medical Assistants Society will hold its organization meeting Thursday, September 22, in the Morton Hotel. The Medical Assistants group is composed of doctors' office secretaries and nurses. Doctors of Medicine of Michigan, Ohio, Indiana, Wisconsin, Illinois and Ontario are urged to encourage their office assistants to attend this informative conference. No registration fee.

11. "Fifty-Year Club" of the Michigan State Medical Society will convene in the Red Room of the Pantlind Hotel at 8:15 p.m. on Wednesday, September 21, to organize, prior to induction into membership in the Club on the occasion of Officers Night ceremonies at 8:30 p.m. in the Ballroom of the Pantlind Hotel.
12. The Michigan Society of Anesthesiologists annual dinner-meeting will be held at the University Club, Grand Rapids, September 21, at 6:30 p.m. Annual election of officers. Guest of honor will be John Lundy, M.D., Rochester, Minn.
13. Alpha Kappa Kappa Fraternity will meet for dinner on Thursday, September 22, 1949 at the Ferguson-Droste-Ferguson Rectal Clinic and Hospital, Grand Rapids. Time: 6:30 p.m.

\* \* \*

## ♦ MEDICAL ASSISTANTS CONFERENCE

Thursday, September 22

Program

- 11 A.M.—Registration—Morton Hotel
- 2 P.M.—Business Meeting  
Organization of State Medical Assistants Society  
Adoption of a Constitution
- 4 P.M.—"The Medical Assistant, the Doctor and Public Health"—JOHN A. COWAN, M.D., Lansing  
*Director of Tuberculosis and Venereal Disease Control, Michigan Department of Health*
- 4:30 P.M.—Intermission to view exhibits
- 6 P.M.—Cocktail Hour—Morton Hotel
- 7 P.M.—Dinner—Morton Hotel

\* \* \*

♦ REGISTER AT EVERY BOOTH—there is something of interest or education in the large exhibit of technical and scientific displays. Stop and show your appreciation of the exhibitors' support in helping to make successful the 1949 MSMS Convention.

\* \* \*

♦ POSTGRADUATE CREDITS are given to every MSMS member who attends the 84th Annual Scientific Session of the Michigan State Medical Society, Wednesday, Thursday, Friday, September 21-22-23, 1949, in Grand Rapids.

\* \* \*

♦ CANCER CONTROL DAY, Saturday, September 24, Ballroom of the Pantlind Hotel (program on page 1055). Subscription luncheon, following the morning's scientific program, will be held in the Furniture Club of the Pantlind Hotel at 12:15 p.m.

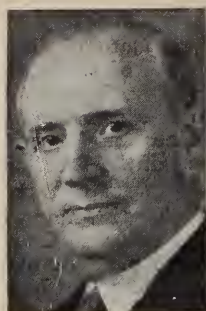
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SAVE AN ORDER FOR THE EXHIBITOR AT  
THE MSMS ANNUAL SESSION



THE PANTLIND





HERBERT ACUFF



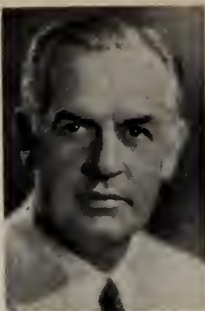
H. E. BACON



J. S. BAER



W. B. CASTLE



A. R. COLWELL



EDWIN DAVIS



W. J. DIECKMANN



F. G. EBAUGH

*Guest  
Speakers*



F. H. FALLS



R. E. GROSS



L. E. HIMLER



A. S. JACKSON



R. L. JACKSON



J. S. LUNDY



R. J. MCQUISTON



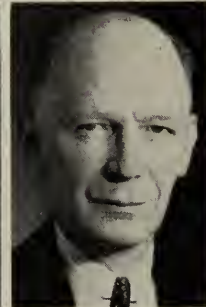
H. C. MILLER



J. E. MOORE



E. D. OSBORNE



J. P. PETERS



D. B. PHEMISTER



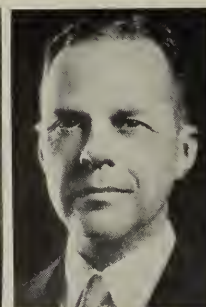
U. V. PORTMAN



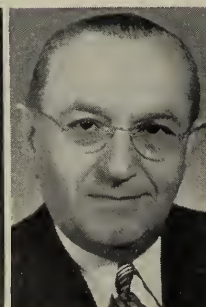
E. C. REIFENSTEIN, JR.



R. O. RYCHENER



A. P. STOUT



MAX THOREK



J. M. WAUGH



W. E. WHEELER



R. M. ZOLLINGER



# The 84th Annual Session and Postgraduate Conference and Cancer Control Day

## PROGRAM OF GENERAL ASSEMBLIES AND SECTIONS

### WEDNESDAY MORNING

September 21, 1949

#### First Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: J. DUANE MILLER, M.D., Grand Rapids

Secretary: H. J. VAN BELOIS, M.D., Grand Rapids

A.M.

#### 9:00 "Treatment of Osteomyelitis as Modified by Antibiotic and Chemotherapy"

DALLAS B. PHEMISTER, M.D., Chicago, Illinois

*Professor of Surgery Emeritus, The University of Chicago; Attending Surgeon, University of Chicago Clinics.*

Modern chemotherapy has brought about improvement in the treatment of pyogenic osteomyelitis as great as that which followed the introduction of antiseptic surgery. Penicillin is by far the most important of the drugs as it is effective against the microorganism in more than ninety per cent of cases. When the diagnosis of acute osteomyelitis is established early and treatment begun within twenty-four to forty-eight hours, the severe symptoms and signs usually subside rapidly and the infection may be overcome in the course of two or three weeks. Surgery is frequently unnecessary, or it may amount only to aspiration or the drainage of an abscess. In cases which respond less well or where treatment is started late, and more or less necrosis of bone has occurred, the establishment of adequate drainage should be the routine procedure. However, efficient chemotherapy for one or two months may so sterilize the dead bone that it becomes invaded and completely replaced by new bone in the course of a few months, and healing occurs without further surgery. In only a small percentage of patients who receive adequate chemotherapy, the disease advances to a chronic stage with the establishment of sequestra and cavities filled with granulation tissue or pus.

A great majority of cases of chronic osteomyelitis are seen in patients who developed the disease before the era of penicillin, or who did not receive chemotherapy until weeks after the onset. Chronic osteomyelitis does not respond to chemotherapy alone, but when treated by combination of surgery and chemotherapy the results are as spectacular as those obtained in acute osteomyelitis. The operation consists in opening the pockets and sinuses, and removal of the infected granulation tissue and dead bone, with much less necessity for effacement of pockets by the removal of living bone than was required before the use of chemotherapy. The transplantation of small fragments of bone may be indicated to fill out large pockets, or of a large onlay graft to reinforce a weakened segment of the shaft.

#### 9:30 "Types of Diabetes Mellitus and their Management"

ARTHUR R. COLWELL, M.D., Evanston, Illinois

*Associate Professor of Medicine and Director of Medical Specialty Training, Northwestern University Medical School.*

Almost all diabetic problems encountered in clinical practice fall into one or the other of six classifications and can be managed accordingly. These groups and the management appropriate for each are as follows:

1. *Unproved diabetes*, usually on discovery of sugar in the urine and when no other clinical findings exist. Treatment should not be advised until suitable diagnostic procedures, especially demonstration of coexistent hyperglycemia, have been performed. Occasional harmless or innocent melliturias may be recognized by this policy.

2. *Mild diabetes*, usually in early cases or in older patients without prominent symptoms. Fully one-half of all proved diabetes is in this category. It can usually be controlled by suitable restriction of the diet without insulin, and without nutritional penalties.

3. *Moderate diabetes*, not severe but manageable by diet restriction alone. Protamine insulin in daily morn-

ing injections is most appropriate in treatment and provides good control in small or moderate dosage without difficulty.

4. *Severe diabetes*, usually in young or thin people or after long duration. It is characterized chiefly by marked symptoms, ease with which acidosis occurs, heavy glycosuria and high hyperglycemia on slight provocation, insulin-sensitivity and difficulty in obtaining good control. Mixtures of insulin and protamine insulin containing excesses of insulin, and globin insulin are most appropriate in the management of diabetes of this severity.

5. *Acute complications* in diabetes, especially acidosis, acute infection and traumatic or surgical complications. Regular insulin in multiple daily dosage, preferably at six-hour intervals, day and night, is mandatory in the management of diabetes during such acute illness.

6. *Chronic complications*, especially those of vascular or infectious origin. The accompanying diabetes is best treated according to the procedures for classes 1 to 4 above, depending on its severity. Good control is desirable but not very effective in affecting the course of the complication. The complication is then treated concomitantly as though diabetes did not exist, with great care to avoid infection and hypoglycemia in the management of vascular lesions of the extremities, heart, brain and eyes.

#### 10:00 INTERMISSION TO VIEW EXHIBITS—Always Something New

#### 11:00 "The Anesthesiologist is Prepared to Anesthetize the Surgical Patient, to Aid in Differential Diagnosis of Pain Paths and to Resuscitate the Patient"

JOHN S. LUNDY, M.D., Rochester, Minnesota

*Head of Section on Anesthesiology, Mayo Clinic, Rochester, Minn.; Professor of Anesthesiology, The Mayo Foundation, Graduate School, University of Minnesota.*

The anesthesiologist has a large variety of methods with which to anesthetize surgical patients. One of the most popular is the use of pentothal and curare plus nitrous oxide and oxygen (50 per cent each). The Magill intratracheal tube provides an excellent airway and is often used to advantage in addition to the above agents. A new three-way valve with four connections is an asset in administering pentothal separately from the curare and for the administration independently of blood or solutions of substances such as Dextran, Periston or Gelatin which support the circulating volume of the cardiovascular system. The anesthesiologist has developed tests for the estimation of the oxygen content of arterial blood, of testing the heart and the brain and blood pressure so that definite safety factors in the conduct of anesthesia are better understood now than before.

The anesthesiologist is able now to help in differential diagnosis of pain paths through his experience in doing regional anesthesia combined with the application of roentgenograms to locate the exact location of the point of the needles against bony landmarks. The use of local anesthetics may be used when the needles are not located as exactly as they must be for other substances, although Dolamin may be injected with the needle less well placed than when alcohol is to be used.

In practically all cases where block anesthesia is to be carried out on a diagnostic basis the man who makes the injection is the one individual who has an opportunity to visit with the patient prior to the injection and have an understanding beforehand and who will record the patient's tolerance for pain, the absence or presence of paresthesias of his old pain in contrast to the paresthesias that definitely are those of a new pain. The location of needles by roentgenograms is important. The injection of solution if under pressure often will or will not produce paresthesias of the old pain, depending upon what nerve is being stimulated. The irritation of the Dolamin when it is used may produce paresthesias of old or new pain. The relief of pain for hours, days or weeks decides many points in regard to the treatment which, on consultation with the internist or surgeon, may be x-ray therapy, physiotherapy, repeated injections with Dolamin, injection of alcohol, nerve section, cordotomy or even prefrontal lobotomy. Certain types of blocks have been more successful than others. Two examples are: (1) Posterior splanchnic block for pain-



## PROGRAM

ful lesions and diseases of the pancreas and (2) Alcohol block of the stellate ganglia in status anginosus. The anesthesiologist in this effort acts as a consultant to the surgeon and his patient.

In resuscitating a patient the anesthesiologist is well prepared because he can produce an adequate airway with an intratracheal tube, because he can aspirate the contents of the respiratory passages and keep them free and he has oxygen available at all times. In this way he is able to adequately maintain pulmonary ventilation and avoid anoxia. Support of the circulating volume in the cardiovascular system is carried out by the use of blood or plasma where they specifically are indicated, otherwise, substances which remain in the circulation longer than other solutions are used. Dextran, Periston and Gelatin are the most popular. These substances are used in the treatment of shock and used prophylactically in an effort to avoid the appearance of shock and are useful in burned patients.

### 11:30 "The Diagnosis and Treatment of Cutaneous Malignancy"

EARL D. OSBORNE, M.D., Buffalo, New York

*Professor of Dermatology & Syphilology, University of Buffalo School of Medicine; Founder and Secretary-Treasurer, American Academy of Dermatology and Syphilology.*

The medical profession generally must improve on its early diagnosis and treatment of cutaneous malignancies. Surveys of hundreds of patients presenting themselves for examination and treatment indicate that the physician is more often at fault than the patient or his family for inadequate diagnosis and treatment. The lesions are accessible, biopsy is simple, and microscopic diagnosis is extremely accurate. Adequate sure treatment is easily available. With early diagnosis and treatment, the cure rate should be almost one hundred per cent.

In this discussion the diagnosis of the various types of cutaneous malignancy will be discussed, as well as the various methods of treatment. It will be emphasized that it is the individual skill, and not the method of treatment, that assures success. Most cutaneous malignancies can be cured by any one of a number of methods. The proper handling of nevi and potentially malignant lesions will also be discussed.

### 12:00 End of First Assembly

## INTERMISSION TO VIEW EXHIBITS

## —Program of Sections—

### WEDNESDAY NOON

September 21, 1949

12:15 p.m. to 1:30 p.m.

(Subscription luncheon meetings)

### SECTION ON DERMATOLOGY AND SYPHILOLOGY

Continental Room, Pantlind Hotel

Chairman: T. H. MILLER, M.D., Detroit

Secretary: H. H. HOLMAN, M.D., Detroit

#### "The Treatment of Eczema Based on Etiology"

EARL D. OSBORNE, M.D., Buffalo, New York

### SECTION ON ANESTHESIA

Rooms 322-324, Pantlind Hotel

Chairman: H. J. VAN BELOIS, M.D., Grand Rapids

#### "The Use of Dextran, Periston and Gelatin for Support of the Circulating Volume in the Cardiovascular System during Anesthesia and Operation"

JOHN S. LUNDY, M.D., Rochester, Minnesota

Certain individuals who might need support during anesthesia and operation may well be given adequate preoperative preparation by the administration of blood in order to provide the individual with as nearly as possible a normal blood count and hemoglobin reading, but whether or not the patient can be prepared ahead of time depends on whether or not the operation is an emergency. In any event one must depend upon at least a minimal blood pressure reading and a pulse rate reading within some limits of normality.

Recently, success has been achieved by the use of certain substances in maintaining circulating volume in the cardiovascular system. One of these is Dextran, a large molecule of sugar, which, when administered intravenously, stays in the circulation longer than do solutions of clear crystalloid material, plasma or the plasma of a blood transfusion. Dextran is not a substitute for a large loss of blood but it actually performs a different function than blood. It may be used in the treatment of shock or in the prophylactic treatment of shock. The quantity used and rate of injection will depend on the response in terms of blood pressure and satisfactory pulse rate. Because Dextran is a sugar it seems more attractive as a substance for intravenous use than might otherwise be the case. The actual mode of disposal of it in the body is not clear.

Periston is a solution of 3.5 per cent polyvinyl pyrrolidone in Ringer's solution and has been used many times, and it is not clear that it is harmful and it does not support the circulating volume in the cardiovascular system. Periston reduces blood pressure to shock levels in dogs and these animals seem to have a species sensitivity to the substance. It seems to be well tolerated by other animals and humans. A solution of osseous gelatin (Plasmoid) similarly supports the circulating volume. Each one of these substances is a bit different in its effectiveness. Criticisms are offered but have not been fully supported as yet.

This is an important field to the anesthesiologist and information is accumulating rapidly which should soon permit a proper evaluation of these substances.

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### SECTION ON UROLOGY

Room 222, Pantlind Hotel

Chairman: HAZEN L. MILLER, M.D., Royal Oak

Secretary: C. F. SCHROEDER, M.D., Detroit

- "1. Trans-Midline Ureteroureterostomy
- "2. Postoperative Urinary Incontinence
- "3. The Clinical Application of Urecholine"

EDWIN DAVIS, M.D., Omaha, Nebraska

\* \* \*

### SECTION ON GYNECOLOGY AND OBSTETRICS

Ballroom, Pantlind Hotel

Chairman: C. N. SWANSON, M.D., Detroit

Secretary: CHARLES JARVIS, M.D., Grand Rapids

#### "Surgical Problems in Pregnancy"

JOSEPH L. BAER, M.D., Chicago, Illinois

A discussion of the surgical problems which arise commonly during pregnancy. The general principles governing surgery during pregnancy are discussed.

Pelvic surgery for conditions such as uterine fibroids, ovarian cysts, and genital neoplasms in general is analyzed. Abdominal conditions such as gall-bladder disease, appendicitis and intestinal pathology are considered. Surgery elsewhere is also presented.

The effect of pregnancy on these several conditions and the hazard to the pregnancy is developed.

# WEDNESDAY AFTERNOON

September 21, 1949

## Second Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: W. S. JONES, M.D., Menominee

Secretary: E. C. LONG, M.D., Detroit

P.M.

### 1:30 "Pulmonary Infections with Histoplasma in Children"

WARREN E. WHEELER, M.D., Columbus, Ohio

*Professor of Pediatrics, Ohio State University College of Medicine*

Histoplasmosis is a fungus disease caused by *Histoplasma capsulatum*. It is recognized in man in essentially two forms. The usual form is a sub-clinical pulmonary infection which, on healing, leaves areas of calcification similar to healed lesions of tuberculosis. Healing is also accompanied by skin sensitivity to histoplasmin which is analogous to the sensitivity seen in tuberculosis. In some areas of the Middle West this type of infection is acquired by about one-half the population by the time they reach adult life. A much less common form of the disease which is seen especially in infants and children is characterized by widespread systemic involvement and has been thought to be uniformly fatal. Only recently has the survival of patients with this latter form of the disease been recognized. The author will present the clinical features of this form of the disease and will show how cultural studies and immunologic studies with some of the newer serologic tests can aid in the recognition of such cases.

### 2:00 "Pitfalls in Urological Diagnosis"

EDWIN DAVIS, M.D., Omaha, Nebraska

*Professor, Urological Surgery, University of Nebraska College of Medicine.*

It is to be recognized that in any field of human endeavor a certain percentage of error is inevitable. There are the errors of omission, the errors of commission and errors due to faulty interpretation of facts and findings, or errors in judgment. There are the amusing errors, the exasperating errors and the ghastly errors. And sometimes although ourselves responsible we are the helpless victims of errors of others. Through foresight, planning, checking, and eternal vigilance this percentage may be minimized but never eliminated.

Urological diagnosis with its instruments of precision, permitting clear visualization of the interior of the bladder and prostate gland, and methods of obtaining urine from each kidney separately, and determining with arithmetical accuracy the ability of each kidney to perform its work; also providing clear x-ray visualization of the interior as well as the exterior of each kidney has come to be almost an exact science.

Even with these extraordinary advantages, however, to say nothing of the valuable and important information to be obtained by blood studies and urinalysis, and afforded by accessibility of the prostate gland to digital palpation through the rectal wall, there remains the human element. It is to be remembered that to be human is to err, and that even an internal combustion engine has been known to make mistakes.

In that to be forewarned is to be prepared, it is therefore advisable occasionally to take stock, analyzing and considering the details of a routine, systematic, step-by-step urological investigation, and enumerating in our minds the pitfalls awaiting us at each stage, to the end that the irreducible minimum of error may be approached and that urological diagnosis may more nearly approximate the status of an exact science.

### 2:30 "Prolonged Labor"

JOSEPH L. BAER, M.D., Chicago, Illinois

*Professor Emeritus, Gynecology and Obstetrics, University of Illinois (Rush); Senior Attending Gynecologist and Obstetrician, Michael Reese Hospital, Chicago.*

The definition, frequency, causes and results, both treated and untreated, are discussed.

Intelligent treatment is based primarily on an accurate evaluation of the factors involved in the delay. Mechanical causes include cephalo-pelvic disproportion, certain breech presentations, deflexion attitudes, occiput posterior and transverse. Cervical dystocia and uterine inertia are analyzed. Management of the various stages of labor is considered in each of these conditions.

### 3:00 INTERMISSION TO VIEW EXHIBITS—

An Amazing Display

### 4:00 "Moles and Melanomas"

ARTHUR P. STOUT, M.D., New York City

*Professor of Surgery, Columbia University.*

The malignant melanomas of the skin and ectodermal mucous membranes of the mouth, nares and anal canal while uncommon are notorious for their extreme degree of malignancy and the infrequency with which they are cured. There is proof that at least half of the skin tumors originate in preexisting benign moles. It can further be demonstrated that half of the moles which become malignant have been traumatized or irritated in some way by the patient himself or a physician. Therefore the problem of what should be done about moles is of importance because while the majority of moles can be maltreated with impunity, occasionally a physician may find himself in the unpleasant position because of ignorance of having been largely responsible for the initiation of a fatal cancer. The problems dealing with which moles may become cancerous, how they should be dealt with, the danger signs in moles, the various types of malignant melanomas, their degree of malignancy, their methods of metastasis and the theories underlying their treatment will be discussed.

### 4:30 "Surgical Management of Malignancy of the Ampullary Region"

JOHN M. WAUGH, M.D., Rochester, Minnesota

*Associate Professor of General Surgery, Mayo Foundation.*

Thirty patients with carcinoma of the papilla or ampulla of Vater have undergone resection at the Mayo Clinic. Thirteen of these had a transduodenal local excision performed and these operations for the most part were carried out before the more radical procedure was available or the patients were considered too poor risks to withstand the more extensive resection. The operative mortality (46%) of transduodenal resection is higher than that for radical pancreaticoduodenectomy (12%) and since no cures were obtained, it is questionable if there is at present any justification for this less radical procedure. Choledochoduodenostomy, cholecystogastrostomy, cholecystojejunostomy, with or without gastroenterostomy, if duodenal obstruction is present or impending, will give as much palliation as local excision with less operative risk.

Seventeen radical pancreaticoduodenectomies were done for carcinoma of the papilla and ampulla of Vater with thirteen being done in one stage with one death for an operative mortality of 8%. Forty-one per cent of the seventeen are alive and well without evidence of recurrence for an average survival time of thirty-eight months. Five patients were operated on over five years ago and one did not survive the operation. Two of the remaining four (50%) are alive without recurrence, sixty-two and sixty-three months following operation. Eleven patients had radical pancreaticoduodenectomies over three years ago and four of the nine surviving operation are living without evidence of recurrence.

These studies emphasize the need for early surgical exploration of patients with unexplained jaundice with the hope that carcinoma of the papilla and ampulla may be discovered early since radical pancreaticoduodenectomy offers a reasonable chance for cure.

### 5:00 End of Second Assembly

### 5:00 Discussion Conferences in Surgery, Medicine, General Practice, Obstetrics, Pediatrics, Dermatology, and Anesthesiology.

(See page 1048.)



# Twenty Discussion Conferences (Quiz Periods)

All Meetings in Pantlind Hotel and Civic Auditorium, Grand Rapids

Twenty Discussion Conferences each with a different chairman—a leader of outstanding ability in his field—will be held Wednesday, Thursday, Friday afternoons, immediately following the end of the General Assembly program for the day. Here is your chance to ask questions of the lecturers and to hear discussed medical matters of value to you in your daily practice.

WEDNESDAY, SEPTEMBER 21, 1949 5:00 to 6:00 p.m.		THURSDAY, SEPTEMBER 22, 1949 5:00 to 6:00 p.m.		FRIDAY, SEPTEMBER 23, 1949 4:30 to 5:30 p.m.	
<b>ANESTHESIA</b> Room 324, Pantlind Hotel Leader <b>H. J. VanBelois, M.D.</b> Grand Rapids Guest Conferee <b>J. S. Lundy, M.D.</b> Rochester, Minn.	<b>MEDICINE</b> Ballroom, Pantlind Hotel Leader <b>E. D. Spalding, M.D.</b> Detroit Guest Conferee <b>A. R. Colwell, M.D.</b> Evanston	<b>MEDICINE</b> Red Room Civic Auditorium Leader <b>R. M. McKean, M.D.</b> Detroit Guest Conferee <b>E. C. Reifenstein, Jr., M.D.</b> New York City	<b>OTOLARYNGOLOGY</b> Mezzanine Lounge Pantlind Hotel Leader <b>O. B. McGillicuddy, M.D.</b> Lansing Guest Conferee <b>R. J. McQuiston, M.D.</b> Indianapolis	<b>GENERAL PRACTICE</b> Furniture Club Pantlind Hotel Leader <b>P. C. Gittins, M.D.</b> Detroit Guest Conferee <b>H. E. Bacon, M.D.</b> Philadelphia	<b>PEDIATRICS</b> Red Room Civic Auditorium Leader <b>A. L. Richardson, M.D.</b> Detroit Guest Conferee <b>R. L. Jackson, M.D.</b> Iowa City
<b>DERMATOLOGY</b> Room 222, Pantlind Hotel Leader <b>H. L. Keim, M.D.</b> Detroit Guest Conferee <b>E. D. Osborne, M.D.</b> Buffalo	<b>OBSTETRICS</b> Schubert Room Pantlind Hotel Leader <b>C. S. Stevenson, M.D.</b> Detroit Guest Conferee <b>J. L. Baer, M.D.</b> Chicago	<b>OBSTETRICS-GYNECOLOGY</b> Sadler Lounge Pantlind Hotel Leader <b>N. F. Miller, M.D.</b> Ann Arbor Guest Conferees <b>W. J. Diekmann, M.D.</b> Chicago <b>F. H. Falls, M.D.</b> Chicago	<b>PUBLIC HEALTH AND PREVENTIVE MEDICINE</b> Parlors B and C Civic Auditorium Leader <b>A. E. Heustis, M.D.</b> Lansing Guest Conferee <b>J. E. Gordon, M.D.</b> Boston	<b>MEDICINE</b> Ballroom, Pantlind Hotel Leader <b>W. S. Reveno, M.D.</b> Detroit Guest Conferees <b>W. B. Castle, M.D.</b> Boston <b>J. P. Peters, M.D.</b> New Haven	<b>RADIOLOGY</b> Continental Room Pantlind Hotel Leader <b>S. W. Donaldson, M.D.</b> Ann Arbor Guest Conferee <b>U. V. Portmann, M.D.</b> Cleveland
<b>GENERAL PRACTICE</b> Red Room, Civic Auditorium Leader <b>M. H. Miller, M.D.</b> Detroit Guest Conferee <b>A. P. Stout, M.D.</b> New York City	<b>PEDIATRICS</b> Continental Room Pantlind Hotel Leader <b>H. F. Becker, M.D.</b> Battle Creek Guest Conferee <b>W. E. Wheeler, M.D.</b> Columbus	<b>SURGERY</b> Black and Silver Ballroom Civic Auditorium Leader <b>F. A. Collier, M.D.</b> Ann Arbor Guest Conferees <b>D. B. Phenister, M.D.</b> Chicago <b>J. M. Waugh, M.D.</b> Rochester, Minn.		<b>NERVOUS AND MENTAL DISEASES</b> Schubert Room Pantlind Hotel Leader <b>J. M. Dorsey, M.D.</b> Detroit Guest Conferees <b>L. E. Hinler, M.D.</b> Ann Arbor <b>F. G. Ebaugh, M.D.</b> Denver	<b>SURGERY</b> Black and Silver Ballroom Civic Auditorium Leader <b>H. M. Bishop, M.D.</b> Saginaw Guest Conferees <b>R. E. Gross, M.D.</b> Boston <b>Arnold S. Jackson, M.D.</b> Madison
		<b>OPHTHALMOLOGY</b> Room 324, Pantlind Hotel Leader <b>A. D. Ruedenann, M.D.</b> Detroit Guest Conferee <b>R. O. Rychener, M.D.</b> Memphis		<b>SYNPHILOLOGY</b> Mezzanine Lounge Pantlind Hotel Leader <b>A. C. Curtis, M.D.</b> Ann Arbor Guest Conferee <b>J. E. Moore, M.D.</b> Baltimore	

ALL MEMBERS ARE INVITED TO JOIN IN THESE QUIZ PERIODS WITH THE GUEST ESSAYISTS

# WEDNESDAY EVENING

September 21, 1949

## General Meeting

Ballroom, Pantlind Hotel

President: E. F. SLADEK, M.D., Traverse City  
Secretary: L. FERNALD FOSTER, M.D., Bay City

P.M.

8:30 Officers' Night—Public Meeting

1. Call to order, and announcements and reports of the House of Delegates, by L. Fernald Foster, M.D.
2. Introduction of President E. F. Sladek, M.D., followed by President's Annual Address.
3. Introduction of President-Elect W. E. Barstow, M.D., St. Louis, and induction of Dr. Barstow into office of President of the Michigan State Medical Society by the Retiring President.  
Response of Dr. Barstow.
4. Introduction of the new President-Elect and other recently elected Officers and of the Chairman of The Council, O. O. Beck, M.D., Birmingham.
5. Presentation of scroll and Past President's Key to Dr. Sladek by the Chairman of The Council, Dr. Beck.
6. Induction of members into the MSMS "Fifty-Year Club" by Retiring President E. F. Sladek, M.D.

9:15

7. The Andrew P. Biddle Lecture.  
"Observations on Medicine and Surgery in Europe" (30 minutes)  
HERBERT ACUFF, M.D., Knoxville, Tennessee.  
*President-Elect International College of Surgeons*
8. Presentation of Biddle Lecture scroll.



ANDREW P. BIDDLE, M.D.  
Patron of Postgraduate  
Medical Education  
(Deceased August 2, 1944)

10:30 Reception by Woman's Auxiliary, Furniture Club.

AUGUST, 1949

# THURSDAY MORNING

September 22, 1949

## Third Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: E. A. OSIUS, M.D., Detroit  
Secretary: C. N. SWANSON, M.D., Detroit

A.M.

9:00

"Early Diagnosis of Carcinoma of the Uterus"  
FREDERICK H. FALLS, M.D., Chicago, Illinois

*Professor of Obstetrics and Gynecology, College of Medicine, University of Illinois.*

The early diagnosis of carcinoma will only be possible when the general practitioners of this country become sufficiently conscious of their responsibility in this direction. The primary requisite is an understanding of the way in which carcinoma develops in the uterus. We must in certain respects un-learn the information regarding the early signs of carcinoma and realize when bleeding and foul smelling discharge appears that we are dealing with a relatively advanced carcinoma of the uterus.

It is also important for us to remember that carcinoma occurs at all ages, not only at the sixth and seventh decades, and that relatively simple tests and procedures applied at the proper time will lead to the detection of early malignant lesions. The Papanicolaou smear, the endometrial biopsy, the Schiller test, the Clark test, the curettage and excision of tissue from suspicious areas on the cervix all have their place in helping to make accurate diagnoses.

One of the most important advances in recent years has been the detection of intraepithelial carcinoma by the examination of biopsies from the cervix of women who have had no signs or symptoms of carcinoma. An appreciation of this possibility can only be acquired through studies of microscopic preparations removed from non-cancerous appearing cervixes.

9:30

"Deep Infections of the Neck"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

*Hospital Staffs of Indianapolis University Medical Center, Methodist Hospital, Indianapolis General Hospital, St. Vincent Hospital and St. Francis Hospital.*

Deep infections of the neck are considered as serious complications of the ear, nose, throat and mouth diseases. These infections usually have their origin in the teeth, salivary glands, pharynx, tonsils, sinuses, vertebrae, temporal bone, or deeply seated retropharyngeal or lateral lymph glands. When these infections descend into the neck they usually follow rather definite pathways which are defined by the fascial planes of the neck. The deep cervical fascia covers and encloses all the structures of the neck such as the muscles, blood vessels, salivary glands, lymph glands, thyroid, and so forth, holding them in their allotted spaces from the base of the skull to the clavicle. By this function many potential spaces are formed which greatly influence the course that suppurations take when they invade these regions.

Infections which occur in the submaxillary, masticator, pharyngomaxillary, pterygomaxillary, parotid, and retropharyngeal spaces will be discussed as to their etiology, anatomical course, and general clinical picture.

The most common complications of deep neck infections are septicemia, asphyxia and massive hemorrhage. These conditions present a serious situation which immediately threaten the life of the patient. The etiology and management of these complications will be presented.

The medical and surgical management of these virulent types of neck infections will be considered. Chemotherapy, in recent years, has greatly influenced the course of these infections; however, it does not supplant surgery, and if suppuration has taken place it should be surgically drained. To procrastinate beyond a reasonable stage, and to depend upon drug therapy, is only to invite a more serious complication.

10:00

INTERMISSION TO VIEW EXHIBITS—  
Something To Interest You



## PROGRAM

### 11:00 "Effect of Prenatal Factors on Survival of New-born Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

*Professor and Head of Department of Pediatrics, University of Kansas School of Medicine.*

Approximately half the deaths in newborn infants can be accounted for by factors that were operating during pregnancy and which had nothing to do with the labor or delivery. Many of the defects and injuries seen in infants who survive the newborn period were caused by prenatal factors. Seventy to eighty per cent of the severe degrees of mental deficiency seen in older children can be related to events that transpired before birth.

While genetic factors account for a large number of these deaths and defects, there is an imposing and growing list of environmental factors which are now known to be capable of causing disease in the fetus, resulting in death or serious injury. The known factors are maternal infection, including German measles, toxoplasmosis and syphilis, a poor maternal diet, sensitization of the mother to Rh, A and B antigens, diabetes mellitus, the pre-diabetic state and irradiation of the maternal pelvic region early in pregnancy.

### 11:30 "A New Principle in the Control of Communicable Diseases"

JOHN E. GORDON, M.D., Boston, Massachusetts

*Professor of Preventive Medicine and Epidemiology, Harvard School of Public Health.*

### 12:00 End of Third Assembly

## INTERMISSION TO VIEW EXHIBITS

# —Program of Sections—

## THURSDAY NOON

September 22, 1949

12:15 p.m. to 1:30 p.m.  
(Subscription luncheon meetings)

### SECTION ON PEDIATRICS

Continental Room, Pantlind Hotel

*Chairman:* R. H. TRIMBY, M.D., Lansing

*Secretary:* E. H. WATSON, M.D., Ann Arbor

#### "Pulmonary Disease in Newborn Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

Hyaline-like membranes lining the terminal air spaces in the lungs are seen in almost half of all the autopsies done on newborn infants. It was previously thought that these membranes were the result of aspiration of amniotic fluid and vernix. Evidence is now available to show that this theory is unlikely. The hyaline-like membranes probably are the result of some injury to the lung which occurs in utero and very likely leads to the premature birth of the infant. These membranes are found in 25 per cent of all infants whose birth weights range from 1000 to 1500 grams. The incidence diminishes in the heavier birth weight groups to the extent that it is not seen in infants who weigh over 3000 grams. It is rare to find hyaline-like material in the lungs in stillborn infants and then only in small amounts.

The presence of hyaline-like material in the lung probably accounts for more deaths among premature infants than any other single factor.

The nature of the etiological agent that produces these membranes is unknown. In older individuals membranes of a similar appearance are found in the lungs of persons dying as the result of acute pneumonias of coccal origin, rheumatic pneumonia, pandemic influenza and radiation pneumonitis. These membranes have also been found in dogs subjected to phosgene gas and cadmium chloride aerosols.

### SECTION ON SURGERY

Ballroom, Pantlind Hotel

*Chairman:* D. B. HAGERMAN, M.D., Grand Rapids

*Secretary:* H. K. RANSOM, M.D., Ann Arbor

#### "Lumbar Hernia"

MAX THOREK, M.D., Chicago, Illinois

An analysis of reported cases of lumbar hernia is presented, and the rarity of the condition pointed out. Anatomic considerations of lumbar hernia in Petit's and Grynfeltt-Lesshaft's triangles are discussed. The varieties of lumbar hernia and the methods of surgical relief are presented. While in well-developed cases a diagnosis is made with facility, in early cases and in obese individuals diagnosis is often difficult. The symptomatology and differential diagnosis are discussed. Two cases from the author's experience are presented by motion pictures and slides.

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### SECTION ON OTOLARYNGOLOGY

Schubert Room, Pantlind Hotel

*Chairman:* W. K. SLACK, M.D., Saginaw

*Secretary:* J. E. CROUSHORE, M.D., Detroit

#### "Endaural Radical Mastoidectomy for Chronic Mastoiditis"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

When the otologist is consulted by a patient with a chronically discharging ear, it is his duty to evaluate the pathology and to recommend treatment. In some cases of continued aural discharge, the pathology present may be of no danger to the patient's life. In other cases are found extremely dangerous situations only awaiting acute exacerbations, which may lead to serious intracranial complications which would threaten the life of the patient. The patient, however, is primarily interested in a cure for his chronic discharging ear and is totally unaware of any serious complication which may befall him. It is the doctor's responsibility to effect a cure of the complaint and also to eliminate the potential danger to life.

From his past experience in radical mastoid surgery, the surgeon may be reluctant to promise the patient a cure for his chronic discharging ear; however, he may stress his ability to prevent an intracranial complication in advising surgery.

Since the development of the fenestration technique and its application to radical mastoid surgery, our chances of effecting a cure of the chronic aural suppuration has been greatly improved. With the end aural approach, using the motor driven burr and working under magnification, the surgeon is able to identify vital structures and remove pathology which in the past he would have allowed to remain.

In the presentation of this technique, types of end aural incisions, important bony landmarks, approach to the mastoid antrum, visualization of vital structures, and application of skin grafts in radical mastoid surgery will be discussed.

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### SECTION ON OPHTHALMOLOGY

Room 222, Pantlind Hotel

*Chairman:* DON MARSHALL, M.D., Kalamazoo

*Secretary:* J. C. GEMEROY, M.D., Detroit

#### "Ocular Allergies"

RALPH O. RYCHENER, M.D., Memphis, Tenn.

The ocular allergies include contact dermatitis and keratoconjunctivitis, vernal conjunctivitis, phlyctenular keratoconjunctivitis, and migraine. The first three groups will be profusely demonstrated by kodachrome slides and some pertinent remarks made with respect to treatment of all four groups.

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### SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Sadler Lounge, Pantlind Hotel

*Chairman:* B. H. DOUGLAS, M.D., Detroit

*Secretary:* O. K. ENGELKE, M.D., Ann Arbor

#### "Epidemiology—Old and New"

JOHN E. GORDON, M.D., Boston, Massachusetts

JMSMS



## THURSDAY AFTERNOON

September 22, 1949

## Fourth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: R. C. POCHERT, M.D., Owosso

Secretary: DON MARSHALL, M.D., Kalamazoo

P.M.

## 1:30 "Indications for Surgery in Gall-bladder Disease"

ROBERT M. ZOLLINGER, M.D., Columbus, Ohio

*Professor and Chairman of the Department of Surgery of the Ohio State University College of Medicine and Chief of the Surgical Service of the University Hospitals of the Ohio State University.*

Despite the ever-improving morbidity and mortality rates in biliary surgery, the physician too frequently advises against surgery except in the presence of serious complications. In part, this attitude emanates from follow-up reports of unsatisfactory results in former years. If the chief indication for surgery is based only on evidence of poor filling, delayed emptying, or unusual size or shape of the gall bladder in the cholecystogram, the results are often disappointing.

Good results are to be expected if approximately 95 per cent of the gall bladders removed contain stones. Many small stones are potentially more troublesome than a solitary large calculus.

The removal of a diseased gall bladder is usually advisable in the presence of such coexistent disorders as peptic ulcer, pancreatitis, or heart disease. These associated diseases do not alter the surgical indications in recurrent biliary colic, common duct stone, or acute cholecystitis, and indeed make surgery all the more imperative. Early hospitalization is urged when the diagnosis of acute cholecystitis is made in order to permit surgical intervention at the optimum time.

Approximately 40 per cent of patients undergoing cholecystectomy will require common duct exploration in order to ensure complete removal of all stones which have escaped into the bile ducts. The incidence of common duct stones recovered upon exploration should approximate 20 per cent of all cases.

The physician should weigh the risk of surgery in the early stages when the diseased gall bladder or gallstones is first discovered against a possible higher mortality rate from complications occurring in later years. He should review all aspects of his management of gall bladder disease from time to time to determine if his methods assure the lowest possible mortality and morbidity. In a population of increasing longevity, the principle of prophylactic surgery in patients with low-grade symptoms is assuming a place of greater importance because of the likelihood of serious complications from biliary tract disease in the elderly.

## 2:00 "Use of Steroid Hormones in Bone Disease of Aging People"

EDWARD C. REIFENSTEIN, JR., M.D., New York City

*Clinical Endocrinologist, Sloan-Kettering Institute; Clinical Research Consultant, Ayerst, McKenna & Harrison.*

Normal adult bone is continuously being formed and being resorbed at constant equal rates. During the process of aging, the rate of bone formation decreases, and since bone resorption continues unabated, the bones become thin. This atrophy of bone is called osteoporosis.

Many factors are of importance in the etiology of this condition, including particularly changes in physical activity and alterations in gonadal hormone production. Some degree of osteoporosis is practically physiological in women after a physiological menopause. For reasons still unknown, certain women exhibit a more marked degree of decrease in bone formation, so that about five years after the change of life clinical manifestations appear. Osteoporosis of a clinical degree is the commonest of all metabolic osteopathies. The condition is more severe after an artificial than after a physiological menopause.

The bones involved in order of predilection are the vertebral column and pelvis, the shafts of the long bones, and the skull. Fracture of the vertebra with collapse, wedging, or herniation of the nucleus pulposus is very common. By x-ray the bones appear less dense than normal rather than smaller. The changes in the bones by x-ray are not pathognomonic of osteoporosis, however, and do occur with the other conditions with too little calcified bone (osteomalasia and osteitis fibrosa generalisata).

Osteoporosis is usually easily diagnosed by the combination of thin bones and normal blood chemistry (calcium, inorganic phosphorus, and alkaline phosphatase). Infrequently a similar picture is produced by multiple myeloma.

The important factors in the treatment of osteoporosis include a high protein diet, an adequate intake of water, an avoidance of excessive intake of calcium and vitamin D, elimination of all unnecessary immobilization, and the administration of gonadal hormones. By metabolic studies it can be shown that both estrogen and androgen cause retention of calcium and phosphorus in the proportions that exist in bone, and that the greatest retention occurs from the combination of estrogen and androgen together. Clinically dramatic improvement occurs in the bone pain and other symptoms after a few weeks of therapy. The most satisfactory results are obtained when therapy is continued for long periods of time (over five years).

## 2:30 "Glaucoma in General Practice"

RALPH O. RYCHENER, M.D., Memphis, Tennessee

*Associate Professor of Ophthalmology, University of Tennessee.*

Glaucoma, the cause for more than 30 per cent of the blindness in this nation, is usually considered as chronic simple glaucoma for which the general practitioner as well as the ophthalmologist must be constantly on the alert. Complaints of morning headaches, transient blurring of vision, and halos about lights are suspicious symptoms for which patients must be thoroughly investigated.

However, there are three forms of glaucoma which are usually seen first by the general practitioner, are often misdiagnosed and neglected, and being in the nature of emergencies, thereby are seen by the ophthalmologist too late to save or restore sight. These are congenital glaucoma, secondary glaucoma incident to traumatic hyphemia, and acute glaucoma. The nature of these groups will be elaborated with respect to differential diagnosis and illustrated by kodachrome slides.

## 3:00 INTERMISSION TO VIEW EXHIBITS—Your Friends Await You

## 4:00 "Indications and Methods for Terminating Pregnancy in the Last Trimester"

WILLIAM J. DIECKMANN, M.D., Chicago, Illinois

*Mary Campau Ryerson Professor, University of Chicago, Department of Obstetrics and Gynecology; Chief of Service Chicago Lying-In Hospital; Attending Gynecologist, Albert Merritt Billings Memorial Hospital.*

Labor is not induced because of post-maturity, borderline pelvic contraction, large baby or for mutual convenience of doctor and patient. There is a very definite risk for both mother and baby in this procedure.

Induction of labor is practiced in the following cases:

*Partial Placenta Previa and Low-lying Placenta*—If there is one or more centimeters dilatation of the cervix, rupture of the membranes, with or without traction by a Willett forceps, may control the bleeding. If labor does not begin in six to eight hours or earlier; in selected cases, fractional doses of pitocin or solution of posterior pituitary beginning with  $\frac{1}{2}$  minims and increasing every thirty minutes up to a maximum dose of 3 minims may be used for a total of 1 ml.

*Abruptio Placenta*—If there is any dilatation, rupture the membranes and permit all of the amniotic fluid to escape. Blood transfusions and other parenteral fluids should be given during this period. If at the end of four to eight hours the uterus has increased in size or there has been further internal hemorrhage as evidenced by the patient's clinical condition, a low cervical cesarean section may be performed.

*Toxemia*—This is a general term covering patients with pre-eclampsia-eclampsia, essential hypertension, etc. The best treatment for toxemia irrespective of the etiology, is termination of the pregnancy. However, conditions must be such that mother and preferably baby also should survive. In general, it is best if the case is not too severe, to use medical management in the hospital until the cervix is ripe; meaning in the primipara, an effaced, softened cervix varying in thickness from 5 to 10 millimeters with 1 or more centimeters dilatation and in the multipara, a cervix which is dilated 2 or more centimeters and is soft.

*Miscellaneous*—Patients with compensated heart disease, pyelonephritis and other complications may have labor induced at the optimum time by rupture of the membranes when the cervix is ripe.

The technique is to strip the membranes about the



cervix as far as one can reach and then rupture them, permitting as much amniotic fluid to escape as possible. In some instances, where the head is very high, it is advisable to give a small dose of pitocin or pituitary fifteen minutes before the membranes are ruptured.

*Vaginal Hysterotomy* is an operation that is rarely used.

*Dührssen's Incisions*—This procedure for patients who are dilated less than 6 centimeters is an admission of a misjudgment. Dührssen's incisions with 7 or more centimeters dilation and the head engaged, is a valuable procedure providing the obstetrician is familiar with the technique. It is better than waiting for the cervix to tear, which it will do in most instances. Properly carried out Dührssen's incisions result in less maternal and fetal morbidity and less fetal mortality.

*Cesarean Section*—Doctors should be criticized severely for not performing an indicated section while the case is still a clean one and the baby is undamaged. The maternal mortality for elective cesarean section should be less than 0.2 per cent and the gross mortality for all types of sections should be less than 1 and in many instances should be less than a half per cent. The fetal mortality in elective cesarean sections should be less than 2 per cent and for all types of cesarean sections should be less than 6 per cent. Cesarean section must not be used as a procedure of last resort. It should be an elective procedure if tumors are blocking the pelvis, if there is marked disproportion, in many cases of placenta previa, some cases of abruptio placenta, selected cases of toxemia, and for certain abnormal presentations and positions. It should be carried out after proper tests of labor, if there is borderline disproportion, or if there is a faulty mechanism of labor.

*Cesarean Hysterectomy*—In this operation all of the uterus, including the cervix or at the most leaving 1 to 2 centimeters of cervix in the infected patient, has its place in obstetrics. It is a simple procedure if one becomes familiar with the technique. In our opinion, it is the safest operation where there is actual or potential intra-uterine infection. The mortality should be less than 1 per cent. We do not believe that anaerobic organisms causing most cases of puerperal infection in clean hospitals respond to any of the antibacterial agents.

The fetal mortality for all types of obstetric delivery must not be neglected. There is an irreducible fetal mortality with all obstetric complications. It should be kept as low as possible. The fetal mortality in our hospitals has been decreasing every year and the still-birth and neonatal uncorrected fetal mortality for fetuses weighing 1000 grams or more is less than 2.5 per cent.

#### 4:30 "Impending Death Under Anesthesia"

MAX THOREK, M.D., Chicago, Illinois

*Professor of Surgery, Cook County Graduate School of Medicine; Surgeon in Chief, American Hospital of Chicago; formerly Attending Surgeon, Cook County Hospital; Founder and General Secretary of the International College of Surgeons.*

Cardiac arrest, fortunately, is one of the rare complications of the administration of spinal anesthesia.

The constantly increasing employment of spinal anesthesia makes it imperative for all those who operate when it is being used to prepare to deal with this gravest of all complications, should it arise. An emergency outfit should be always at hand, and a prior rehearsal of the entire operating team to make each member thoroughly familiar with his part in preventing a fatal outcome, is imperative.

When the abdominal or thoracic cavities have already been opened, the surgeon can reach the heart directly, but if no such opening exists he is justified in opening the abdomen or thorax at once, and beginning cardiac massage without an instant's delay, as speed is the indispensable requisite of any procedure dealing with cardiac arrest.

Three methods of cardiac massage are described: standard method, the method of Nicholson, and the intercostal approach of Lampson. The third method is useful in ventricular fibrillation, when complete cardiac arrest has not occurred.

Methods of suspension of heart and respiratory action are discussed.

A motion picture of one of the author's cases is presented.

#### 5:00 End of Fourth Assembly

#### 5:00 Discussion Conference in Surgery, Medicine, Otolaryngology, Gynecology and Obstetrics, Ophthalmology, Public Health and Preventive Medicine (See Page 1048)

## THURSDAY EVENING

September 22, 1949

### STATE SOCIETY NIGHT

Ballroom, Pantlind Hotel

10:30 An evening of entertainment for all registrants, their ladies and guests.

Cabaret-style Dance and Floor Show.

Host: Michigan State Medical Society.

(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

## FRIDAY MORNING

September 23, 1949

### Fifth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: L. C. HARVIE, M.D., Saginaw

Secretary: R. H. TRIMBY, M.D., Lansing

A.M.

#### 9:00 "Basic Principles in the Treatment of Blood Dyscrasias"

WILLIAM B. CASTLE, M.D., Boston, Massachusetts

*Professor of Medicine and Chairman of Department of Medicine, Harvard Medical School.*

The remarkable advances in the treatment of some types of anemia provide a striking contrast to the vexing or as yet insoluble problems of therapy of other blood dyscrasias. Therefore, the assets and liabilities of existing methods need to be clearly understood. There are five general methods of treatment of varying effectiveness and permanence: (1) Substitution therapy for anemias of nutritional or of endocrine deficiency; (2) Chemotherapy of infection causing anemia or resulting from agranulocytosis, and of leukemia and lymphoma; (3) Splenectomy, in hemolytic anemias and purpura; (4) Irradiation in polycythemia and leukemia; finally, (5) Transfusion, both as a form of therapy in its own right and as a useful accessory to other forms of treatment.

Pernicious anemia responds to liver extract or to Vitamin B<sub>12</sub> produced by microbial synthesis. Hypochromic anemia responds to orally administered ferrous iron. Thyroid extract is necessary for the complete return to normal of the blood of patients with hypothyroidism. Chemotherapy, particularly with penicillin, is the most effective treatment of infections secondary to agranulocytosis by allowing time for spontaneous recovery of the bone marrow. When anemia is due to malaria or to endocarditis, eradication of the infection is the primary requirement. Modern palliatives with effects resembling those of arsenic in the treatment of leukemia and lymphoma are the so-called nitrogen mustards, urethane, and in leukemia especially in children, analogs of folic acid. Splenectomy, long known to be effective in congenital hemolytic jaundice, is now recognized frequently to be useful in the acquired form of this disease and in instances of chronic leukopenia. It is the only effective, though by no means universally successful, treatment for the generalized bleeding tendency due to deficient platelets in the blood. Sometimes splenectomy or modern operations joining the portal and systemic veins in the abdomen may relieve the pressure in the veins of the esophagus that leads to recurrent and sometimes fatal hemorrhage. Irradiation in the form of x-ray, long known to be useful in the treatment of polycythemia, leukemia, and lymphoma, can now be given by the use of radio-active isotopes, particularly of phosphorus. These compounds supply a form of internal irradiation to all rapidly growing cells of the body. Unfortunately, for this

## PROGRAM

reason their action is not very selective, but in those chronic forms of leukemia in which x-ray is effective, radio-active phosphorus may be a more convenient way of supplying the same effect. X-ray, however, possesses the great advantage in the treatment of lymphoma that it can be given locally in high intensity to lymphoid enlargements when these press on vital structures. Transfusion is valuable whenever the hemoglobin cannot be raised by other means, whether as a preparation for operation or a means of keeping a patient an ambulatory and useful member of society. Transfusion may also be effective in controlling hemorrhage due to deficiency of blood platelets. In hemophilia, repeated transfusions of fresh blood remain the best form of emergency treatment for severe bleeding despite the development of blood fractions possessing anti-hemophilic effects. Replacement transfusions are of life-saving from sensitization treatment of infants at birth suffering from sensitization to the Rh factor. The development of the blood bank has made available to the patient the right type of blood in adequate amounts in a way never before possible.

### 9:30 "Recent Advances in the Study of Venereal Diseases"

JOSEPH E. MOORE, M.D., Baltimore, Maryland

*Associate Professor of Medicine and Adjunct Professor of Public Health, Johns Hopkins Hospital, Baltimore, Maryland.*

This communication is a report of recent American advances in venereal disease research. Included is a discussion of the use of oral penicillin in the prophylaxis of gonorrhea; the multiplication time of the *Treponema pallidum* in vivo; the cultivation of *T. pallidum* in artificial media; the recent discovery of treponemocidal antibody distinct from reagin; the use of penicillin in the treatment of syphilis, with especial reference to procaine penicillin; the prophylactic (early abortive) treatment of syphilis; failure rates in early syphilis and their relation to serologic pattern; prenatal syphilis; the necessity for retreatment of syphilitic pregnant women in every pregnancy; the Jarisch Herxheimer reaction; the dynamics of penicillin action; new antibiotics.

### 10:00 INTERMISSION TO VIEW EXHIBITS— They Close at 3:30 p.m. TODAY

### 11:00 "The Diagnosis and Treatment of Common Diseases of the Anorectum"

HARRY E. BACON, M.D., Philadelphia, Pennsylvania

*Professor and Head of Department of Proctology, Temple University Medical School and Hospital; Head of Department, St. Mary's Hospital.*

Diagnosis and treatment of common diseases of the anorectum and discussion with particular mention of fissure, hemorrhoids, prolapse, pruritus ani and cancer.

### 11:30 "Iatrogenicity in Medicine"

FRANKLIN G. EBAUGH, M.D., Denver, Colorado

*Professor of Psychiatry, Head of Department, University of Colorado Medical Center.*

Iatrogenic illnesses are those disorders induced in the patient by the physician, based on the physician's examination, manner and discussion. Until recently medical investigation and education adhered to a mechanistic methodology which precluded recognition of the importance of emotional factors in the genesis and course of disease.

This educational hiatus is usually manifested among the medical profession in three areas:

1. Failure to recognize the existence of emotional factors in illness. This failure typically results in extended and costly organ investigations which frequently "calmifies" existing emotional disturbance, depletes the patient financially, terminates with a feeling of bitterness toward legitimate medicine and the seeking of surcease among quacks.

2. Inability to treat minor emotional disorders if recognized. The situation is provocative of anxiety and/or hostility in both the doctor and patient and usually ends in rejection of the patient by the doctor with accentuation rather than alleviation of the patient's illness.

3. A lack of awareness of the functional importance of the doctor's feelings, attitudes, and behavior in the treatment of disease. The doctor's anxiety, hostility, and need of personal gratification frequently plays a role of tremendous importance in the course of a patient's illness.

Lack of awareness and functional understanding of these basic phenomena not only deprives the doctor of an essential therapeutic orientation but frequently incites and perpetuates illness. One-third of all illness is emo-

tionally determined. An additional third of patients have significant emotional duress coexistent with organ pathology. A psychiatrist cannot be a good doctor without a basic understanding of medicine. A doctor cannot practice good medicine without a working knowledge of the role emotion plays in the cause and cure of disease.

12:00 End of Fifth Assembly

## INTERMISSION TO VIEW EXHIBITS

# —Program of Sections—

## FRIDAY NOON

September 23, 1949

12:15 p.m. to 1:30 p.m.

(Subscription luncheon meetings)

### SECTION ON MEDICINE

Ballroom, Pantlind Hotel

*Chairman:* C. B. BEEMAN, M.D., Grand Rapids

*Secretary:* G. C. THOSTESON, M.D., Detroit

#### "The Causes and Instance of Salt Deficiency"

JOHN P. PETERS, M.D., New Haven, Connecticut

\* \* \*

### SECTION ON GENERAL PRACTICE

Furniture Club, Pantlind Hotel

*Chairman:* E. C. LONG, M.D., Detroit

*Secretary:* J. F. FAILING, M.D., Grand Rapids

#### "Newer Trends in the Management of Large Bowel Surgery"

HARRY E. BACON, M.D., Philadelphia, Pennsylvania

\* \* \*

### SECTION ON NERVOUS AND MENTAL DISEASES

Schubert Room, Pantlind Hotel

*Chairman:* F. P. CURRIER, M.D., Grand Rapids

*Secretary:* R. P. SHEETS, M.D., Traverse City

#### "The Place of Psychiatry in Industry"

LEONARD E. HIMLER, M.D., Ann Arbor, Michigan

*Associate Professor of Mental Health, School of Public Health, University of Michigan; Medical Director, Mercywood Hospital, Ann Arbor, Mich.*

Industrial psychiatry is concerned with the application of the principles and certain specific techniques of psychiatry and mental hygiene to the field of industrial medicine, personnel work, and management. Although this specialty is new and still in its formative stage, it has distinct contributions to make in respect to both the clinical and the preventive aspects of industrial medical practice. The psychiatrically oriented physician will make more accurate personality evaluations in the course of the preplacement examination, and more effectively treat neuropsychiatric disorders as they occur in industry. He is more capable in the handling of emotionally handicapped individuals, and in the application of direct psychotherapy where it is required in industrial practice.



## PROGRAM

Preventive functions involve numerous educational and advisory activities in which the physician shares with other personnel the responsibility for accident prevention, supervisory training, improvement in the quality and quantity of counseling throughout the organization, the handling of "problem employees," and a review of the emotional components in labor relations policies, union negotiations, and grievance procedures.

### SECTION ON RADIOLOGY

Continental Room, Pantlind Hotel

Secretary: J. E. LOFSTROM, M.D., Detroit

#### "Contact Roentgen Therapy for Superficial Lesions"

URSUS V. PORTMANN, M.D., Cleveland, Ohio

Contact Roentgen Therapy apparatus was developed by Chaoul as a substitute for radium therapy to accessible pathologic conditions. It has certain advantages over radium therapy or other methods of giving roentgen therapy for superficial lesions: (1) the voltage is low therefore depth dose minimal; (2) the roentgen ray output high because of the construction of the tube with anode close to the end, therefore treatment time very short; (3) the radiation can be accurately localized and limited with special cones; (4) it obviates the hazards of handling radium.

The discussion will be based upon Kodachrome slides showing patients before and after treatment. These will include hemangiomas, epitheliomas, verruca vulgaris and plantaris, and similar superficial lesions. Most of the conditions shown would be difficult to treat by other methods.

\* \* \*

## FRIDAY AFTERNOON

September 23, 1949

### Sixth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: C. A. PAUKSTIS, M.D., Ludington

Secretary: C. B. BEEMAN, M.D., Grand Rapids

P.M.

#### 1:30 "Acute Surgical Abdomen"

ARNOLD S. JACKSON, M.D., Madison, Wisconsin

*President, American Gaiter Association; Secretary, International College of Surgeons, United States Chapter.*

A brief review of medical diseases that may closely simulate acute surgical lesions of the abdomen is given. Important differential diagnostic points are discussed. A résumé of the important acute surgical lesions of the abdomen is presented, among them being: perforating ulcer, cholecystitis, pancreatitis, obstruction, traumatic, congenital, thrombosis, appendicitis, enteritis, etc. The characteristic diagnostic points are summarized and the pre- and postoperative care is stressed. The important factors in the surgical treatment of these conditions are emphasized. Special attention is given to the role of antibiotics in conjunction with surgery of the acute abdomen and particularly in the treatment of peritonitis.

#### 2:00 "Importance of Breast Feeding"

ROBERT L. JACKSON, M.D., Iowa City, Iowa

*Associate Professor, Department of Pediatrics, State University of Iowa.*

Artificial feeding of infants has become so easy and successful that the importance of breast feeding is underestimated and needs to be restressed. In recent years physicians, as well as other groups of persons, have begun to question the advantages of breast feeding. There are fewer deaths and illnesses among those babies breast fed than among those artificially fed.

The lower mortality and morbidity rates in breast-fed infants are the results of multiple factors. The danger of bacterial contamination of the milk is practically eliminated. Human errors in prescribing and preparing formulas are avoided. Breast-fed infants are more resistant to infections. Resistance to infection is related to the amount and quality of protein in the diet. The protein content of the mother's milk during the early weeks of lactation is especially good and beneficial for the newborn.

Another advantage of human milk is its higher nutritional value. Milk from a healthy mother who is eating a good diet meets all the nutritional needs of her child with the exception of iron and vitamin D. Breast feeding proves more convenient and economical for many families. One of the most common allergens causing infantile eczema is cow's milk. The involuntary processes in the mother after termination of pregnancy occur earlier if the mother is nursing her infant. The security and affection automatically given with breast feeding is important in establishing a good relationship between the mother and her infant.

In our country the majority of babies today are born in hospitals where rigid feeding schedules are followed and where the babies are segregated from their mothers. Newer trends in pediatrics show marked preference for less rigid feeding schedules and more freedom in early mother-infant companionship.

#### 2:30 "Cancer of the Breast"

URSUS V. PORTMANN, M.D., Cleveland, Ohio

*Director of Therapeutic Radiology, Cleveland Clinic.*

In this country cancer of the breast occurs more than twice as frequently as cancer in any other location in either sex. The general average of curability is not as high as might be expected of cancer which is located so near the surface. The principal reason for this is that treatment is delayed too long after patients become aware of the first symptoms or signs. It has been found that the reason for delay in over 60 per cent of cases has been attributable to the patient. Some are unobservant about their anatomy, others are ignorant of the significance of the discovery of a lump in their breasts or other symptoms and not a few fear that they have cancer and therefore procrastinate.

In addition to the delay in proper treatment for which patients are responsible, in about 25 per cent bad advice by the physician consulted at the first sign—usually a lump in the breast—is at fault. Such patients are reassured when their doctors give placebos and tell them their symptoms are not serious. This trouble may be because the textbook signs of frank cancer are not present or recognized and the significance of the patient's symptoms disregarded.

Although surgical procedures have been employed for centuries in the treatment of cancer of the breast they have limitations. The principal limitation is the amount of tissue that can be removed by radical mastectomy. In many cases the disease has progressed beyond these limitations and complete removal is impossible.

During the past half century it has been found that cancer cells may be destroyed or their growth inhibited by roentgen ray and radium therapy. However these methods of treatment also have physical and biological limitations. Therefore because of the limitations of both surgical and radiological procedures many patients with cancer of the breast cannot be cured.

There are certain clinical signs of incurable cancer of the breast. These will be presented and discussed in their relationship to the indications and limitations of different methods of treatment.

\*From the Cleveland Clinic Foundation and the Frank E. Bunts Institute, Cleveland, Ohio.

#### 3:00 INTERMISSION TO VIEW EXHIBITS—Your Last Opportunity

#### 3:30 "The Surgical Treatment for Coarctation of the Aorta"

ROBERT E. GROSS, M.D., Boston, Massachusetts

*Ladd Professor of Children's Surgery, Harvard Medical School, Boston, Mass.; Surgeon-in-Chief, The Children's Hospital, Boston.*

#### 4:00 "Causes and Treatment of Lower Nephron Nephrosis"

JOHN P. PETERS, M.D., New Haven, Connecticut

*John Slade Ely Professor of Medicine, Yale University School of Medicine; Attending Physician, New Haven Hospital; Consulting Physician, Norwalk and Stamford Hospitals.*

#### 4:30 End of General Assembly

#### 4:30 Discussion Conferences in Surgery, Medicine, General Practice, Radiology, Pediatrics, Nervous and Mental Diseases, Syphilology, and Pathology.

(See page 1054)

#### 5:30 END OF SCIENTIFIC ASSEMBLY AND OF 1949 ANNUAL SESSION

# PROGRAM

## CANCER CONTROL DAY SATURDAY, SEPTEMBER 24, 1949

Ballroom, Pantlind Hotel

*Sponsored by the MSMS Cancer Control Committee, the American Cancer Society, Michigan Division, Inc., and the Michigan Foundation for Medical and Health Education, Inc.*

### PROGRAM

- A.M.
- 9:05 "Psychiatric Management of the Cancer Patient"  
FRANKLIN G. EBAUGH, M.D., Denver, Colorado
- 9:25 "The Indications and Limitations of X-ray and Radium Treatment for Cancer"  
URSUS V. PORTMANN, M.D., Cleveland, Ohio
- 9:45 "The Diagnosis and Management of the Leukemias"  
WILLIAM B. CASTLE, M.D., Boston, Mass.
- 10:15 "Cancer of the Thyroid"  
ARNOLD S. JACKSON, M.D., Madison, Wisconsin
- 10:40 "Embryomas of the Kidney in Childhood"  
ROBERT E. GROSS, M.D., Boston, Massachusetts
- 11:10 to 12:00 Questions and General Round Table Discussion  
Moderator: NORMAN F. MILLER, M.D., Ann Arbor, Chairman, Cancer Control Committee, Michigan State Medical Society.
- P.M.
- 12:15 Subscription Luncheon (Furniture Club, Pantlind Hotel)

END OF CANCER CONTROL DAY

## WOMAN'S AUXILIARY

### TENTATIVE PROGRAM

All activities not otherwise indicated will be held in the Pantlind Hotel, Grand Rapids

TUESDAY, SEPTEMBER 20

- P.M.
- 6:30 Welcoming Dinner (Continental Room)
- 8:00 Style Show (Continental Room)

WEDNESDAY, SEPTEMBER 21

- A.M.
- 10:30 Pre-convention Board Meeting (Mezzanine Lounge, Pantlind Hotel)
- P.M.
- 1:00 Luncheon (Schubert Room)
- 6:30 Banquet. Honoring the National President, Mrs. David Allman of Atlantic City (Furniture Club)

- 10:00 Open House and Reception. Honoring District Delegates and Presidents of the Woman's Auxiliary and of the Michigan State Medical Society (Schubert Room)

THURSDAY, SEPTEMBER 22

- A.M.
- 8:30 Organization Breakfast for District Directors. Sponsored by Organization Chairmen Mrs. Don Wright and Mrs. Oscar D. Stryker (President's Suite)
- 10:00 Annual Board Meeting (Red Room, Civic Auditorium)
- P.M.
- 1:00 Annual Luncheon (Furniture Club)
- 3:00 Post-convention Board Meeting (Furniture Club)

## SCIENTIFIC EXHIBITORS

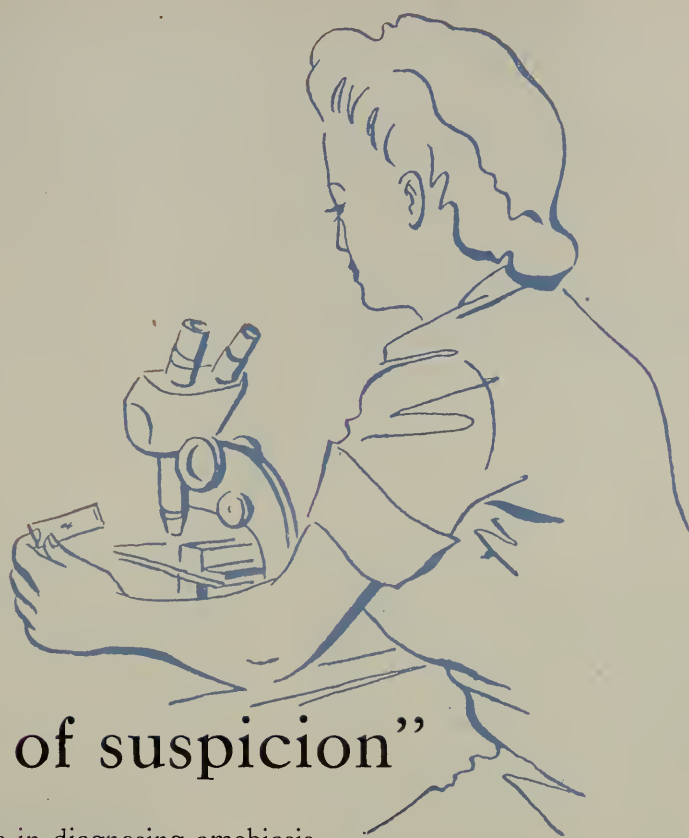
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Number

- I Detroit Society for Prevention of Blindness and Grand Rapids Association for the Blind and for Sight Conservation.  
"Glaucoma"
- II National Foundation for Infantile Paralysis.  
"Distribution of Poliomyelitis Virus in a Community"
- III Michigan Diabetes Association.  
"Diabetes Control"
- IV Hillsdale County Medical Society Cancer Control Committee.  
"Hillsdale Plans for Tumor Detection"
- V Michigan Department of Health.  
"Health in Action"
- VI Harper Hospital Medical Staff, Detroit.  
"(1) Endocrinopathics; (2) Radioactive Isotopes."
- VII Wayne University College of Medicine.  
"The Use of Medical Photography and Illustration in Teaching and Research"
- VIII University of Michigan Medical School. (The Neuropsychiatric Institute).  
"Scientific Services of the Medical School and Hospital at the University of Michigan."
- IX Michigan Heart Association, Inc., Michigan Society for Crippled Children and Adults, Inc., and Rheumatic Fever Control Committee, MSMS.  
"MSMS Rheumatic Fever Control Program"
- X Michigan Crippled Children Commission.  
"Physical Restoration of the Severely Handicapped Child"
- XI Michigan Society of Anesthesiologists.  
"Respiration in Relation to Anesthesia"
- XII Grand Rapids Committee of Region Fracture Committee, American College of Surgeons.  
"Fracture of Tibia"
- XIII American National Red Cross.  
"The Blood Program"
- XIV International College of Surgeons.
- XV MSMS Public Relations Committee.  
"The Public Relations Program."



# Technical Exhibitors

Booth Number	Booth Number
Abbott Laboratories, North Chicago, Ill. ....C-10	Maltbie Chemical Co., Newark, N. J. ....B-8
Allen Agency, Detroit, Mich. ....F-2(a)	S. E. Massengill Company, Bristol, Tenn. ....A-12
A. S. Aloe Company, St. Louis, Mo. ....B-1	J. W. McCrae X-Ray Company, Detroit, Mich. ....A-10
American Hospital Supply Corp., Evanston, Ill. ....D-15	McKesson Appliance Company, Toledo, Ohio ....E-8
Ames Company, Inc., Elkhart, Indiana ....F-11	Mead Johnson & Company, Evansville, Ind. ..A-24, A-25
Armour & Company, Chicago, Ill. ....B-16	Medical Arts Surgical Supply Company, Grand Rapids, Mich. ....C-4, C-5, C-6
Ayerst, McKenna & Harrison, Ltd., New York ....B-13	Medical Film Guild, New York ....A-8 and Cinema Room
Baker Laboratories, Cleveland, Ohio ....E-3	Medical Protective Company, Fort Wayne, Ind. ....E-5
Bard-Parker Company, Inc., Danbury, Conn. ....B-18	Merck & Company, Inc., Rahway, N. J. ....B-14
Barlow-Maney Labs., Inc., Cedar Rapids, Iowa ....F-3	Wm. S. Merrell Company, Cincinnati, Ohio ....A-23
A. C. Barnes Company, New York ....A-11	Michigan Medical Service, Detroit, Mich. ....B-2
Barry Laboratories, Inc., Detroit, Mich. ....B-12	Mid-America Sales Corp., Detroit, Mich. ....F-9
Becton-Dickinson & Company, Rutherford, N. J. ....C-18	Middleton's, Inc., Grand Rapids, Mich. ....E-16
Bilhuber-Knoll Corporation, Orange, N. J. ....B-7	C. V. Mosby Company, St. Louis, Mo. ....B-15
The Borden Company, New York ....F-10	National Drug Company, Philadelphia, Pa. ....E-11
Brooks Appliance Company, Chicago, Ill. ....D-14	The Nestle Company, Inc., New York ....F-13
Burroughs Wellcome & Co., Inc., New York ....D-10	Wm. R. Nidelson Company, Detroit, Mich. ....D-17
California Pharmacal Company, Detroit, Mich. ....F-6	Noble-Blackmer, Inc., Jackson, Mich. ....E-12
Camel Cigarettes, New York ....A-21	Ortho Pharmaceutical Corporation, Raritan, N. J. ..A-5
Cameron Heartometer Company, Chicago, Ill. ....D-16	Parke, Davis & Co., Detroit, Mich. ....C-12, C-13, C-14, C-15
Carnation Company, Los Angeles, Calif. ....E-9	Pelton & Crane Company, Detroit, Mich. ....B-3
Ciba Pharmaceutical Products, Inc., Summit, N. J. ....E-7	Pet Milk Sales Corporation, St. Louis, Mo. ....C-8
Coca-Cola Company, Atlanta, Ga. ....A-18	Philip Morris & Company, Ltd., New York ....D-13
Commercial Solvents Corporation, New York ....F-15	Physicians Service Laboratory, Detroit ....F-14
Detroit Creamery Company, Detroit, Mich. ....F-18	Picker X-Ray Corporation, New York ....D-7, D-8
Detroit X-Ray Sales Company, Detroit, Mich. ..B-4, B-5	Pitman-Moore Company, Indianapolis, Ind. ....E-10
Dictaphone Corporation, Detroit, Mich. ....F-12	Procter & Gamble Company, Cincinnati, Ohio ....D-18
Dietene Company, Minneapolis, Minn. ....B-17	Professional Management, Battle Creek, Mich. ....D-3
Doho Chemical Corporation, New York ....C-7	The Quarry, Incorporated, Ann Arbor, Mich. ....B-6
E & J Resuscitator Company, Detroit, Mich. ....F-7	Randolph Surgical Supply Co., Detroit, Mich. ....B-9
Electronic Surgical Equipment Company, Inc., Philadelphia, Pa. ....A-14	Rystan Company, Inc., Mount Vernon, N. Y. ....E-13
Encyclopaedia Britannica, Inc., Detroit, Mich. ....A-22	Sandoz Chemical Works, Inc., New York ....A-4
Farnsworth Laboratories, Chicago, Ill. ....E-15	W. B. Saunders Company, Philadelphia, Pa. ....A-7
H. G. Fischer & Company, Chicago, Ill. ....A-1	Schenley Laboratories, Inc., New York ....C-1
C. B. Fleet Company, Inc., Lynchburg, Va. ....D-11	Schering Corporation, Bloomfield, N. J. ....B-19
General Electric X-Ray Corporation, Chicago, Ill. ..A-17	G. D. Searle & Company, Chicago, Ill. ....D-2
Gerber Products Company, Fremont, Mich. ....C-9	Sharp & Dohme, Inc., Philadelphia, Pa. ....D-19
Hanovia Chemical & Mfg. Co., Newark, N. J. ....C-3	Smith, Kline & French Laboratories, Philadelphia, Pa. ....E-4
J. F. Hartz Company, Detroit, Mich. ....B-10, B-11	Spencer Incorporated, New Haven, Conn. ....C-11
Hoffmann-La Roche, Inc., Nutley, N. J. ....E-18	E. R. Squibb & Sons, New York ....A-26
Holland-Rantos Company, Inc., New York ....F-17	Swift & Company, Chicago, Ill. ....A-6
G. A. Ingram Company, Detroit, Mich. ..D-4, D-5, D-6	Testagar & Company, Inc., Detroit, Mich. ....F-8
The Junket Folks, Little Falls, N. Y. ....A-13	Upjohn Company, Kalamazoo, Mich. ....F-16
C. B. Kendall Company, Indianapolis, Ind. ....F-4	U. S. Vitamin Corporation, New York ....F-5
A. Kuhlman & Company, Detroit, Mich. ....A-19, A-20	Universal Products Co., Norristown, Pa. ....F-2(b)
Lanteen Medical Laboratories, Inc., Chicago, Ill. ....E-14	VanPelt & Brown, Inc., Richmond, Va. ....A-2
Lea & Febiger, Philadelphia, Pa. ....F-1	Westinghouse Electric Corp. Pittsburgh, Pa. ..C-16, C-17
Lederle Laboratories, New York ....C-2	White Laboratories, Newark, N. J. ....D-9
Liebel-Flarsheim Company, Cincinnati, Ohio ....A-9	Winthrop-Stearns, Inc., New York ....D-12
Eli Lilly & Company, Indianapolis, Ind. ....E-2	Wolverine X-Ray Sales & Service, Detroit, Mich. ....E-6
J. B. Lippincott Company, Philadelphia, Pa. ....A-27	Wyeth Incorporated, Philadelphia, Pa. ....C-19
M & R Dietetic Laboratories, Inc., Columbus, O. ..E-1	Zimmer Mfg. Company, Warsaw, Ind. ....E-17
Maico Hearing Service of Michigan, Grand Rapids ..A-15	



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The difficulties and pitfalls in diagnosing amebiasis are stressed frequently in medical literature.

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1. Warshawsky, H.; Nolan, D. E., and Abramson, W.: Hepatic Complications of Amebiasis, *New England J. Med.* 235:678 (Nov. 7) 1946.
2. Manson-Bahr, P.: Some Tropical Diseases in General Practice: “A Post-War Legacy,” *Glasgow M. J.* 27:123 (May) 1946.



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## STATE AID FOR LOCAL HEALTH DEPARTMENTS

The legislature has appropriated \$320,000 in state aid for local health departments during the year beginning July 1. While this amount falls far short of the \$1,800,000 asked by the Citizens Committee of 100, it is \$123,000 above the current year's grant, and \$126,500 more than the state budget officials had recommended.

The legislature, in appropriating the \$320,000, stipulated that it be divided equally among the counties of the state providing full-time local health services to their residents.

This so-called equalization plan is particularly beneficial to two-county or multiple-county health departments. Where previously one-county units received \$3,500; two-county units, \$5,000; and three (or more) county units, \$6,000 in state aid; one-county units will now receive \$4,444.44; two-county units, \$8,888.88; three-county units, \$13,333.32; and four-county units, \$17,777.76 in state aid. (These figures are based on seventy-two counties to include Lapeer which is expected to open a department this year.)

\* \* \*

## NINTH ANNUAL RAGWEED POLLEN SURVEY

The ninth annual Michigan ragweed pollen survey got under way in 57 stations in the state on July 15 and continues until September 15. The survey, planned to provide hay fever sufferers with information on pollen concentration, is being conducted in more cities than has any previous survey. This increased service is possible only through the co-operation of local hospitals, laboratories and health departments.

New stations this year are located in Lapeer, Mio, Roscommon, East Tawas and Paris. The station at Mackinaw City and one station in Bay City have been discontinued.

Thirty-two of the collecting stations are in laboratories where there are personnel trained to count the pollen. Reports from these laboratories will be submitted directly to the local health officer. The remaining collecting stations will send their slides to regional counting laboratories which will send reports to the local health officers. Where there are no local health officers, the reports will be submitted directly to the Michigan Department of Health.

The decentralized method of handling reports makes it possible for the local health officer to give each day to press and radio and other interested individuals report of the pollen concentration in his area.

Local health officers are furnished blanks for recording the daily pollen counts in their areas and for transmitting the information to the Michigan Department of Health along with the daily morbidity reports.

\* \* \*

The name of the Division of Local Health Services of

the Michigan Department of Health is now changed to the Division of Local Health Administration.

Under the Division of Local Health Administration, there is a Section of Local Health Services.

Arthur G. Baker, M.D., M.P.H., will become chief of the Section of Local Health Services later this month. Dr. Baker, who has his Master's Degree in Public Health from the University of Michigan School of Public Health, recently was director of the Allegan County Health Department.

\* \* \*

C. Dale Barrett, M.D., M.P.H., has joined the staff of the Division of Laboratories as co-ordinating physician. Dr. Barrett, who received his Master's Degree in Public Health from the University of Michigan this spring, formerly was director of the Ottawa County Health Department.

\* \* \*

Clarence Poppen, M.D., M.P.H., has joined the staff of the Division of Disease Control, Records & Statistics, as chief of the Section on Cancer and Adult Health Services.

Dr. Poppen, who for the past four years has been associated with Dr. Frederick Collier in the surgical unit of University Hospital, Ann Arbor, was a practicing physician in Hillsdale County for fourteen years.

\* \* \*

Dr. K. E. Markuson, director of the Division of Industrial Health of the Michigan Department of Health for the past ten years, resigned effective July 1 to become assistant chief of the Bureau of Industrial Hygiene of the Connecticut Department of Health. John Soet, chief engineer of the Division, has been named acting director.

Dr. Markuson is president of the American Conference of Governmental Industrial Hygienists, president of the Michigan Association of Industrial Physicians and Surgeons and chairman of the Michigan State Medical Society's committee on Industrial Health. Mr. Soet has been with the Division for eleven years and has been its chief engineer for the past five years.

\* \* \*

Dr. John M. Lynch, a 1946 graduate of the University of Michigan Medical School, who recently completed nine months of Industrial Health training in Yale University, has joined the staff of the Division as an industrial health physician.

\* \* \*

Marvin Nelson, M.D., who has been associated with the Department of Dermatology and Syphilology of the University of Michigan, is the new medical director of the Michigan Rapid Treatment Center, Ann Arbor, succeeding S. J. Axelrod of USPHS.

More than 12,000 cases of venereal disease have been

(Continued on Page 1060)

# Facts About Conception Control

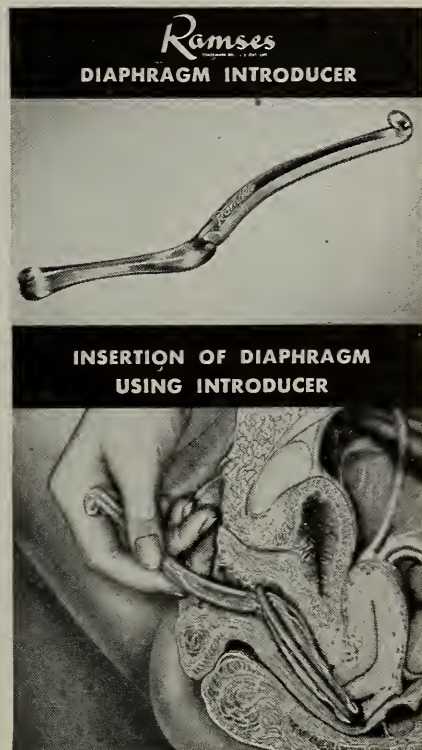
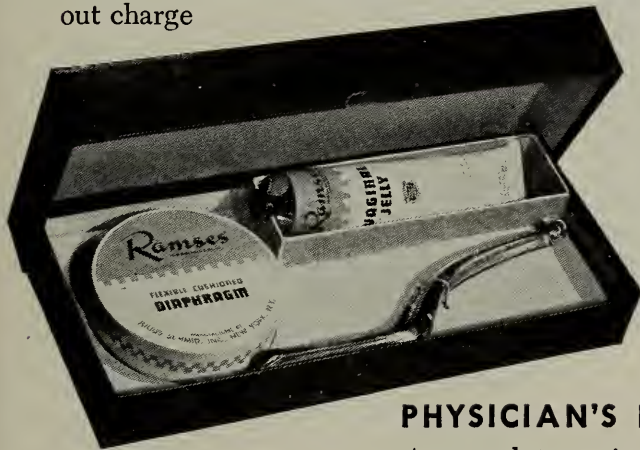
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† Active Ingredients: Dodecaethyleneglycol Monolaurate 5%; Boric Acid 1%; Alcohol 5%.



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(Continued from Page 1058)

treated in the Michigan Rapid Treatment Center in Ann Arbor since it opened its doors July 5, 1944.

All patients treated are referred to the Center from health departments, clinics or practicing physicians.

Of the cases treated, 58 per cent have been males and 51 per cent have been under the age of twenty-five years. Approximately 2,200 cases were treated in the past twelve months.

The Center uses a ten-day to two-weeks intensive treatment schedule for syphilis patients and a one- to three-day treatment schedule for gonorrhea patients. The Center also provides diagnostic consultation service for private physicians, and also makes spinal fluid and other examinations for syphilis for physicians or health departments having no facilities for making these examinations.

\* \* \*

R. W. Menges, D.V.M., USPHS employe assigned to the Division of Disease Control, Records and Statistics, for the first six months of this year, was transferred to the histoplasmosis laboratory at the University of Kansas medical school.

\* \* \*

Norman Henderson and W. D. Ferguson of the Division of Laboratories are authors of an article, "Bacteriophage Typing of Salmonella Typhi" in the June issue of *The Journal of Laboratory and Clinical Medicine*.

\* \* \*

Public health people from New Zealand, Greece, China, Brazil, Columbia, Chile, Nova Scotia and British Columbia arrived in the Department during June and early July for study or observation.

They were E. F. Scott, chief engineer, Christchurch Drainage Board, New Zealand; Dr. A. P. Kanellakis of Greece, graduate student at the University of Michigan; Jane Pan, former supervising nurse in Nanking, China; Dr. Emmanuel deCastro of Rio de Janeiro, Brazil, who has been studying at Yale University; Dr. Miguel Ordonez of Colombia, a graduate student of Michigan State College; B. Suarior Pentanek of Chile; Dr. Rice of Nova Scotia; and Margaret Ross and Florence Campbell, supervising nurses from British Columbia.

#### INCIDENCE OF CERTAIN REPORTABLE DISEASES

Disease	June 1949	June 1948
Diphtheria .....	13	7
Gonorrhea .....	807	887
Lobar pneumonia .....	89	85
Measles .....	2224	6665
Meningococcic meningitis .....	8	12
Pertussis .....	153	135
Poliomyelitis .....	21	5
Rheumatic fever .....	62	58
Scarlet fever .....	451	549
Syphilis .....	732	1143
Tuberculosis .....	423	552
Typhoid fever .....	4	8
Undulant fever .....	15	13
Smallpox .....	0	0

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## NEWS MEDICAL

David B. Ruskin, M.D., of Caro, Michigan, published an article "Mesantoin (Methylphenylethyl Hydantoin) in Treatment of Epilepsy in a State Hospital," in *Archives of Neurology and Psychiatry*, November, 1948.

Sidney Friedlaender, M.D., and Alex S. Friedlaender, M.D., of Detroit, Michigan, published an article, "Antihistamine Therapy in Allergy," in *The Journal-Lancet*, June, 1949.

F. Bruce Fralick, M.D., and Robert D. Kiess, M.D., Ann Arbor, Michigan, published an article, "Use of Antihistaminic Drugs in Control of Atropine Dermatitis and Conjunctivitis," in *Archives of Ophthalmology*, May, 1949.

Clifford D. Benson, M.D., Grover C. Pemberthy, M.D., and Edward J. Hill, M.D., Detroit, published a paper, "Hernia Into the Umbilical Cord and Omphalocele (Amniocoele) in the Newborn," in the *Archives of Surgery* June, 1949.

An article published in The JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY by R. L. Hass, M.D., entitled "Some Practical Considerations About Endometriosis,"

appeared in *The General Practitioner* of Australia and New Zealand, May 15, 1949.

\* \* \*

The first Michigan Cancer Conference, sponsored by the Michigan State Medical Society, Michigan Department of Health and the Michigan Division of the American Cancer Society, will be held at the Hotel Olds, Lansing, on October 11, 1949. The meeting will convene at 10:30 a.m. Invitations have been sent to medical, dental and nursing groups and to all lay health minded organizations of the state, to news organizations and other groups, inviting them to send representatives to this meeting.

The cancer program in Michigan will be discussed from the standpoint of providing facilities throughout the state for the early diagnosis of cancer. The proposed local programs are to be built around the Hillsdale Plan for Tumor Detection with modifications to meet local conditions.

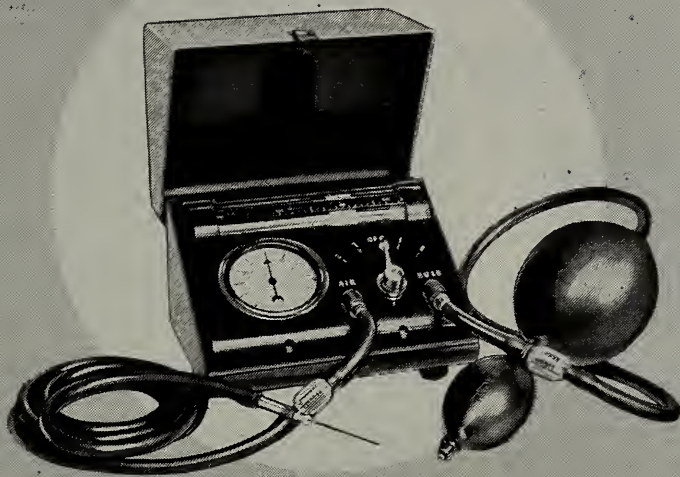
(Continued on Page 1064)



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Jackson, Michigan

(Continued from Page 1062)

As a result of this meeting, it is hoped lay people and physicians will unite in a program that will strike a very decisive blow against cancer in this state.

\* \* \*

*The Committee on Iodized Salt* of the Michigan State Medical Society held a recent meeting in Detroit.

*Dr. O. P. Kimball* of the Goiter Study Committee of the United States Public Health Surveys gave a review of the national picture regarding iodized salt. He stated that following the failure of the Bolton bill to have all table salt iodized, the Goiter Study Committee agreed to stop attempting further legislation to permit the Salt Manufacturers Association to introduce a campaign of education, advertising and sales promotion to stimulate the sale of iodized salt. The program of education which is to start in June, 1949, will consist of four parts:

1. The material to be submitted to the advertising head of the salt companies for their use.
2. Speakers to attend meetings of the association of State Health Officers to speak in behalf of this program.
3. Radio commercials to be used by the United States Public Health Medical Association and the State Medical Societies, such as: "Simple goiter is easiest known disease to prevent—use iodized salt."
4. The plans for a re-survey of the Michigan schools previously studied in regard to the use of iodized salt were outlined. Dr. Kimball and Dr. Towsley were suggested to follow through with this survey and detailed plans for same will be formulated in the near future.

Dr. Gerstner suggested that a five-minute talk to delegates of the Michigan State Medical Society be given to apprise them of the importance of this problem.

\* \* \*

*Dr. Charley Smyth*, who has been assistant medical director of Wayne County General Hospital since 1941, is leaving September 1 to become a member of the faculty of the University of Colorado, Denver, where he will be Assistant Director of Postgraduate Medicine and assistant professor of Medicine in the Medical School.

\* \* \*

*The United States Public Health Service* of the Federal Security Agency announce a competitive examination for appointment of medical officers of the United States Public Health Service will be held on October 3, 4, and 5, 1949. Applications must be received *not later than September 5, 1949*. Appointments will be made in the grade of Assistant Veterinarian (1st Lt.) and Senior Assistant Veterinarian (Capt.). Appointments are permanent in nature and provide opportunities to qualified veterinarians for a lifetime career in research and public health. Assignments are made with consideration for the officer's preference, ability, and experience. This examination will be primarily for public health and re-

(Continued on Page 1066)

# SPECIFIC DESENSITIZATION is the aim in Ragweed Pollinosis..

The antihistaminic drugs "do not replace the more lasting benefit obtainable by successful specific . . . desensitization."

Feinberg, S. M.: Postgrad. Med. 3: 92 (1948).

"Apparently, desensitization treatment is still the method of choice, and the antihistaminic drugs cannot be considered as substitutes."

Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).

The antihistaminic drugs "are valuable additions to our armamentarium, but do not . . . supplant the specific desensitizing injections."

Brown, G. T.: M. Ann. District of Columbia 16:675 (1947).

Pollen desensitization "still remains the treatment of choice in hay fever."

Rosen, F. L.: J. M. Soc. New Jersey 45: 390 (1948).

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(Continued from Page 1064)

search veterinarians, and successful candidates will be assigned to positions which will probably involve research, field investigation, and food sanitation.

Appointments will be made in the grades of Assistant Surgeon (1st. Lt.) and Senior Assistant Surgeon (Capt.). Appointments are permanent in nature and provide opportunities to qualified physicians for a lifetime career in clinical medicine, research, and public health. All commissioned officers are appointed to the general service and are subject to change of station.

\* \* \*

Sez Cecil Palmer, of London, according to *The Detroit Medical News*: "Socialized medicine is workable only in heaven where it isn't needed or in hell where they already have it."

\* \* \*

*The Northern Tri-State Medical Association* (Michigan, Indiana, Ohio) will hold its 1950 convention in Grand Rapids on April 11, 1950. William H. Gordon, M.D., 1553 Woodward Avenue, Detroit, is Secretary of the Tri-State Association.

\* \* \*

A total of 13,221 physicians were registered at the 1949 AMA Session in Atlantic City. In addition, 14,671 guests were registered—a total of 27,892 M.D.s and guests (not including the exhibitors or members of their family.)

\* \* \*

K. E. Markuson, M.D., Lansing, who has served as director of the Bureau of Industrial Health since July, 1938, resigned as of July 1, 1949, to assume the position as assistant director of the Bureau of Industrial Hygiene of the Connecticut State Health Department, with headquarters at Hartford, Connecticut. Dr. Markuson will be assistant to Albert S. Gray, M.D., long-time Bureau Director.

Dr. Markuson served as chairman of the MSMS Industrial Health Committee for four years, during which time the three Industrial Health Conferences of the Michigan State Medical Society were held in Detroit.

The Michigan State Medical Society wishes Dr. Markuson full success and enjoyment in his new location.

\* \* \*

*The American College of Surgeons* will hold its 35th Clinical Congress at the Stevens Hotel, Chicago, October 17-21, 1949.

\* \* \*

C. E. Umphrey, M.D., Detroit, addressed the Mount Clemens Kiwanis Club on June 22. His subject was "Political Medicine is Never Good Medicine."

\* \* \*

*The International College of Surgeons*, United States Chapter, will hold its Fourteenth Assembly at Haddon Hall, Atlantic City, on November 8-11, 1949. The convocation will be held in Convention Hall. For program, write Secretary Arnold Jackson, M.D., 1516 Lake Shore Drive, Chicago, Illinois.

\* \* \*

(Continued on Page 1068)



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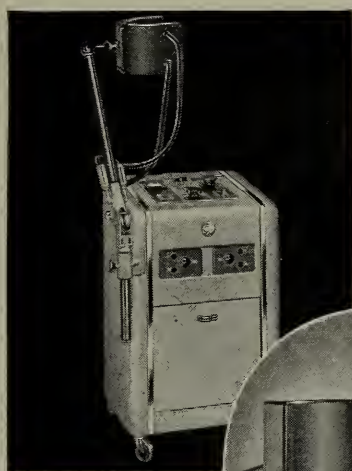
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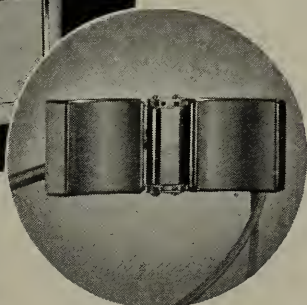
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*(Continued from Page 1066)*

J. O. Thomas, M.D., was signally honored by the citizens of North Branch, where he has practiced for fifty-five years, on Sunday, July 24. More than 3,500 patients and friends gathered to celebrate "Doctor Thomas Day" and to eulogize their long-time friend and medical practitioner for the outstanding record of service rendered to his community over the years.

\* \* \*

Wm. A. Hudson, M.D., Detroit, was re-elected Historian of the American College of Chest Physicians at the 15th Annual Meeting held in Atlantic City last June. Willard B. Howes, M.D., Detroit, is Governor for the State of Michigan.

The Michigan Chapter of the ACCP elected the following officers for 1949: Wm. P. Chester, M.D., Detroit, president; Cletus J. Golinvaux, M.D., Monroe, vice president; and C. P. Mehas, M.D., Pontiac, secretary-treasurer.

\* \* \*

At the Grand Rapids Postgraduate Clinic Day, held in May, a total of 417 doctors of medicine registered. This was fit testimony for the outstanding program arranged by the Kent County Medical Society.

\* \* \*

*Correction:* The name of Henry K. Ransom, M.D., which appeared on page 778 of the June JOURNAL, was misspelled "Fansom." Apologies!

\* \* \*

The Mississippi Valley Medical Society will hold its 14th meeting at the Jefferson Hotel, St. Louis, September 28-29-30, under the presidency of Alphonse McMahon, M.D., of St. Louis University. For program, write Secretary Harold Swanberg, M.D., 209 W.C.U. Bldg., Quincy, Illinois.

\* \* \*

Russell N. DeJong, M.D., Ann Arbor, is chairman of the Education Committee and Dave B. Ruskin, M.D., of Caro is chairman of the Program Committee of the American Academy of Neurology which held its first scientific meeting at French Lick in June, 1949.

\* \* \*

The American College of Physicians and the W. K. Kellogg Foundation will shortly inaugurate a program of postgraduate medical fellowships, whereby young physicians in the Latin American countries will be brought to the United States for a year or more of special training.

\* \* \*

The sum of \$275,000 recently was presented to the University of Pennsylvania by the Penn Mutual Life Insurance Company for two projects: (a) \$250,000 to build a Penn Mutual Heart Clinic in the University's new medical center; and (b) \$25,000 for the extension of the cancer research project at the University.

\* \* \*

"Modern Treatment of Fractures and Other Traumatic Conditions" is the subject of a postgraduate course at Massachusetts General Hospital sponsored by the Harvard Medical School and running from October 24 to November 3, 1949. For program, write Harvard Medical School,

*(Continued on Page 1070)*

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(Continued from Page 1068)

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\* \* \*

*Harvey C. Bodmer, M.D.*, Kalamazoo, recently returned from a tour of Europe where he observed medical practice, especially under socialized auspices in England.

\* \* \*

*E. F. Sladek, M.D.*, president of the Michigan State Medical Society and chairman of the Traverse City Chamber of Commerce Health Committee, presided recently at an organizational meeting for proprietors of hotels, restaurants, food shops and soda fountains to draft plans for conducting a large scale food handling school. This project will serve as a pilot model for similar schools to be conducted throughout Michigan.

\* \* \*

*At the Upper Peninsula Medical Society meeting* Blaney Park, June 17-19, 247 physicians were registered. Guest speakers included: *A. J. French, M.D.*, Ann Arbor, *J. A. Cowan, M.D.*, Lansing, *F. B. Fralick, M.D.*, Ann Arbor, *E. S. Gurdjian, M.D.*, Detroit, *R. J. Noer, M.D.*, Detroit, *J. H. Maxwell, M.D.*, Ann Arbor, *D. L. Bishop, M.D.*, *H. B. Elliott, M.D.*, *H. W. Woughter, M.D.*, and *G. J. Curry, M.D.*, all of Flint; and *E. A. Osius, M.D.*, Detroit.

\* \* \*

*Robert V. Funsten, M.D.*, Professor of Orthopedic Surgery at the University of Virginia Medical School, and a former practitioner of Detroit, died at his home in Charlottesville, Virginia, on July 25.

\* \* \*

*The Academy of General Practice of Wayne County* will hold its annual autumn clinic at Henry Ford Hospital on October 26-27, 1949.

\* \* \*

*L. Fernald Foster, M.D.*, Bay City, and *Cyrus C. Sturges, M.D.*, Ann Arbor, were guest speakers at the Rocky Mountain Medical Conference held in Butte, Montana, August 2-3-4, 1949. Dr. Foster also is guest speaker at the convention of the Michigan Consumer Finance Association, Statler Hotel, Detroit, October 27; his subject will be "Political Medicine—To Be or Not To Be?"

\* \* \*

*The National Institute of Health* of the Public Health Service, Federal Security Agency, announces a grant of \$12,000 to Wayne University for a study of "Physiological Processes in Movable Joints and Associated Structures." Also a total of \$16,524 to the University of Michigan for three studies: "(a) Chemotherapy of Tuberculosis; (b) Oxygen Studies on Mammalian and Lower Forms; and (c) A Study of the Influence of Various Factors on the Formation of Vitamins in Green Plants."



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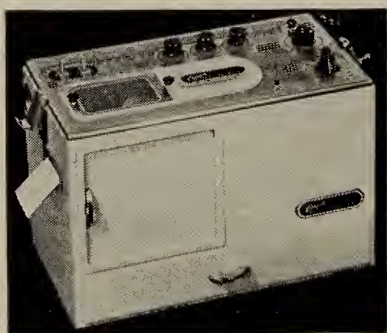
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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**HOW TO BECOME A DOCTOR.** By George R. Moon, A.B., M.A., Examiner and Recorder, University of Illinois Colleges of Medicine, Dentistry and Pharmacy, Philadelphia, Toronto: The Blakiston Company, 1949. Price \$2.00.

This is a much-needed book, making available to the prospective student the requirements for premedical training, outlining the chances of entry into medical schools, and giving suggestions for the premedical training: where to take it, what to take, and where to secure advice when necessary. Also given are the approved four-year medical schools in the United States, including special entrance requirements, rates, tuition. A chapter is devoted to how to gain admission to medical schools, the tests required, the forms to be filled and the interviews. Special problems are discussed, such as: women in medicine, success or failure in school, special problems as expenses, outside employment, health, marriage. Similar information is given with reference to dentistry, pharmacy. This book should be available for boys and girls in high school who may have an inclination to study medicine.

**PUBLIC HEALTH STATISTICS.** By Marguerite F. Hall, M.A., Ph.D., Associate Professor of Public Health Statistics, School of Public Health, University of Michigan. Second edition, revised. New York: Paul B. Hoeber, Inc., 1949. Price \$7.50.

The book was originally intended to be used as a text in basic courses in public health statistics. It is said that almost as much is learned now in the public health fields from statistics as from the test tube. Facts and information about numbers of people, deaths, marriages, births, et cetera, have been matters of general interest for a long time. The Romans kept some such records, and took censuses of their people for military purposes. The earliest known compilations of death records was by order of the Council of London in 1532. The science now is unbelievably vast and accurate. This text shows how to make records, how to interpret them, and gives a considerable number of formulas for use in the work. There is much of theory but more of logic and fact. A valuable and almost indispensable book for students in public health work.

**THE HEBREW MEDICAL JOURNAL**, Volume 1, 1949, 22nd year of publication. Bi-lingual, semi-annual journal. Edited by Moses Einhorn, M.D.

In this issue a symposium is presented on current health conditions in Israel, with the following subjects: "Errors and Faults in Diagnosis and Treatment of Infectious Diseases in Israel," by Moshé Fischel, M.D. In his article Dr. Fischel discusses the most prevalent diseases, such as malaria, typhus and dysentery, and shows how they take a different course in Israel than in the Western Hemisphere.

"In Clinical Forms of Tuberculosis Among the Jews in Israel," Dr. Rudolf Levy gives a summary of the prev-

(Continued on Page 1074)

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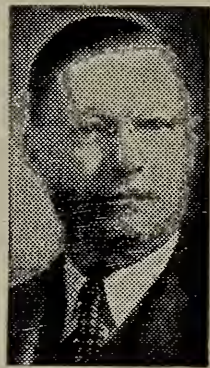
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(Continued from Page 1072)



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alence of this disease among the Jews in Israel, as compared with other peoples. "Public Dental Health in Israel," by Max Laufer, D.D.S., is a description of the remarkable progress made in that country in just a few years in the dental health of the population.

Under the heading, "Old Hebrew Medical Manuscripts," Dr. Z. Muntnner presents an interesting paper on "Poison, Charm and Love Potions Among Jews and Other Peoples." In the section devoted to Personalia, Dr. Z. J. Plashkes of Tel Aviv writes on the first native Palestinian physicians, describing how these pioneers laid the groundwork for the present medical progress in Israel.

**CLINICAL AUSCULTATION OF THE HEART.** By Samuel A. Levine, M.D., Clinical Professor of Medicine, Harvard Medical School; Physician, Peter Bent Brigham Hospital; and W. Proctor Harvey, M.D., Research Fellow in Medicine, Harvard Medical School Assistant in Medicine, Peter Bent Brigham Hospital. 327 pages with 286 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$6.50.

A vast amount of the knowledge obtainable from the stethoscope is not being utilized, and this volume is intended to stimulate doctors to take every advantage of the simple means at hand, for every doctor carries a stethoscope. Cases are presented, auscultation findings given and electrocardiographs given. The illustrations are profuse. Interpretation of murmurs, and other findings are given special attention. A stimulating book.

**VOCABULARY GUIDE.** A Teacher's Supplement to The American Nurses Dictionary. By Alice L. Price, R.N. Philadelphia & London: W. B. Saunders Company, 1949.

This book is unique in that there are no definitions, just a listing of various sections, such as Anatomy and Physiology, Bandaging, Chemistry, throughout the field of practice of medicine, and under each heading an alphabetical list of the words used. That and nothing else; the idea being to supply a guide in the teaching process. The whole book is printed in typewriter type, very neat, with paper cover.

**MEDICINE OF THE YEAR—First issue, 1949.** *Internal medicine:* Hugh J. Morgan, M.D., Professor of Medicine, Vanderbilt University; *Obstetrics:* Frank Whitacre, M.D., Professor of Obstetrics and Gynecology, University of Tennessee; *Pediatrics:* Henry G. Poncher, M.D., Professor of Pediatrics, University of Illinois; *Surgery:* Warren H. Cole, M.D., Professor of Surgery, University of Illinois; *Editorial Direction:* John B. Youmans, M.D., Dean, College of Medicine University of Illinois. Philadelphia: J. B. Lippincott Co., 1949. Price \$5.00.

Dean Youmans, of the Medical College of University of Illinois, has assembled a group of advisers, and had reviewed all the medical literature of the year. Each assistant has then written his observations of advances, new discoveries, old things newly observed, and in general, has compiled the new and significant things in his special field. This is written in narrative form, but at the end of the chapter is a set of references so the student can do further reading, and supplement the information given in this book. The practitioner is thus provided with the new or useful material from the preceding year's literature, of course depending on the

(Continued on Page 1076)



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Esophageal Surgery, one week, starting October 10.

Thoracic Surgery, one week, starting October 3.

Breast and Thyroid Surgery, one week, starting October 10.

Fractures and Traumatic Surgery, two weeks, starting October 3.

**GYNECOLOGY**—Intensive Course, two weeks, starting September 26, October 24.

Vaginal Approach to Pelvic Surgery, one week, starting September 19, November 7.

**OBSTETRICS**—Intensive Course, two weeks, starting September 12, November 7.

**MEDICINE**—Intensive General Course, two weeks, starting October 3.

Gastroenterology, two weeks, starting October 24.

Gastroscopy, two weeks, starting September 26, October 24.

Electrocardiography and Heart Disease, four weeks, starting September 7.

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Clinical Course third Monday of every month.

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(Continued from Page 1074)

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ability of the editors to screen out the less valuable which has been printed. The book has successfully accomplished this purpose, and is a useful handbook. The chapter on Otolaryngology was contributed by A. C. Furstenberg, of the University of Michigan.

**POLIOMYELITIS.** Papers and Discussions presented at the First International Poliomyelitis Conference. Compiled and edited for the International Poliomyelitis Conference. Philadelphia: J. B. Lippincott Company, 1949. Price \$5.00.

The first session, "The Importance of Poliomyelitis as a World Problem," was moderated by Thomas Francis, Jr., of the University of Michigan. The second session was devoted to "The Pathogenesis of the Early Stage," the third session, "Management of the Early Stage," the fourth session, "The Convalescent Stage." There were ten sessions. James L. Wilson, M.D., of Ann Arbor, and Joseph G. Molner, M.D., of the Detroit Board of Health, were speakers, and Paul G. Wooley, Jr., M.D., of Children's Hospital, Detroit, was one of the panel members. The conference was held in New York City, July 12-17, 1948. Every paper and all the discussions are presented here, making a valuable record as well as giving a vast amount of information.

**MANUAL OF MEDICAL EMERGENCIES.** By Stuart C. Cullen, M.D., Professor of Surgery; Chairman, Division of Anesthesiology, State University of Iowa College of Medicine and E. G. Gross, M.D., Professor and Head of Department of Pharmacology State University of Iowa College of Medicine. Chicago: The Year Book Publishers, Inc., 1949. Price \$3.75.

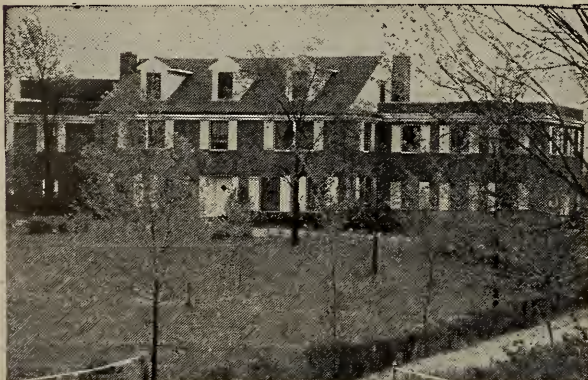
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likely to be called in an emergency. A few items described are airway and artificial respiration, circulatory emergencies in sudden cardiac arrest, coronary occlusion, shock, acute poisoning, head injuries, serum disease, asthma, acute coma, burns, sunstroke, etc. The method of treatment is carefully given. It will make a very useful book, small enough to be carried in a pocket.

**MEDICAL ETYMOLOGY**—The History and Derivation of Medical Terms for Students of Medicine, Dentistry, and Nursing: By O. H. Perry Pepper, M.D., Professor of Medicine, University of Pennsylvania. 263 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$5.50.

Medical, dental, and nursing terminology is a new and strange language for the average student. In past years knowledge of Latin and Greek was considered a prerequisite for the study of medicine, and some knowledge of the classical terms was more or less universal in students of the medical sciences. Of late years much less Latin knowledge is required and no Greek. The new terms are almost unintelligible. This book gives a history of the growth of scientific words, their meaning and use. Every word is given its derivation, and structure, and a good definition. Words are also grouped under the department or section of medicine where they will most likely be encountered first. There is also a general index.

**ORAL AND DENTAL DIAGNOSIS**—With Suggestions for Treatment: By Kurt H. Thoma, D.M.D., F.D.S.R.C.S. Eng., Professor of Oral Surgery, Emeritus, and Brackett Professor of Oral Pathology, Harvard University. With Contributions by Henry Goldman, D.M.D., Head of the Dental Department, Beth Israel Hospital, Boston; Fred Trevor, D.M.D., Formerly Instructor in Oral Pathology, Harvard Dental School. New, 3rd edition. 563 pages with 776 illustrations, 60 in color. Philadelphia and London: W. B. Saunders Company, 1949. Price \$9.50.

This third edition is almost completely rewritten or rearranged. The emphasis is still diagnosis, but modern and new methods are used, to make the text more exact and authoritative. Much new material is given with discussion of the benefits. Fluorides are mentioned as a prophylactic, and the technique given. The fractures of maxillary, nasal, facial, bones are accurately described with the accepted treatment. Techniques of history taking demand a chapter, and are well presented. The book will fill a needed place in the busy dentist or oral surgeon's library.

**ATLAS OF ROENTGENOGRAPHIC POSITIONS.** By Vinita Merrill, while Educational Director, Picker X-Ray Corporation. In two volumes. C. V. Mosby Co., 1949. Price \$30.00.

These two volumes have been arranged in an orderly manner. The illustrations and reproductions are concise and clear. The anatomy is sufficiently detailed for the technician's use, yet not so detailed as to be misleading. There is no conceivable radiological position which has not been included, and the photographs illustrating the placing of the patient are well conceived and self-explanatory. No attempt has been made to give technical factors and this, I believe, is a wise move.

Such a set of books will be excellent as an aid in teaching technicians and physicians a variety of methods for obtaining information radiographically about a given portion of the body. An excellent bibliography is included. Volume 1 contains the glossary, and both volumes carry their own index. G.T.P.

**PHYSICIANS' DESK REFERENCE** To Pharmaceutical Specialties and Biologicals. In Four Sections. J. Morgan Jones, Editor and Publisher. Rutherford, N. J.: Medical Economics, Inc., 1948.

The book is printed in four colored paper sections. The first (pink) is an alphabetical index; second (yellow) Drug and Pharmaceutical Index; third (blue) Therapeutic Indications Index; fourth (white) Div. A—Professional Products Information, Div. B—General Professional Information. The book is a handy reference to the innumerable pharmaceuticals and biologics available for the use of the busy doctor. It is published yearly in December and is distributed free to 130,000 doctors, and 3,500 hospitals with over fifty beds.

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## REMEMBER NOVEMBER 2ND?

That "wonderful feeling" that all will turn out right on Capitol Hill is bound to produce the same type of hangover many of us had on the morning of November 3. Don't think for a minute that our opposition is going to silently fold up its tents and filter back into the offices of the Federal Security Administration without putting up a fight. This is all-out war to the bitter end, and if you feel that we have made any gains, let's consolidate them and forge ahead to lick this "cradle to grave" philosophy once and for all.—From the *P.R. Reporter* of the Pennsylvania State Medical Society.

## BANANAS AS A HEALTH FOOD

The use of powdered banana as added carbohydrate in the milk formula is widely advocated for both well and sick infants. Mashed, sieved pulp may be fed separately in amounts varying from one teaspoonful to a whole banana daily. The banana formula because of its thickness is not likely to be vomited. It is hence well adapted to being given in small amounts at frequent intervals to infants who are weak, without appetite and fail to make satisfactory gains in weight. It is particularly useful in premature and malnourished babies who cannot digest most fruit juices. One authority found that when the pulp was fed separately from the milk formula, the more underweight the infants were the greater the average weight gain. Those more than fifteen per cent underweight made average gains of 4.2 ounces weekly, which is more than that made by normal infants. Children with scurvy were cured with no other remedy than two sieved bananas daily.—*Good Health*, January, 1949.

## FINDINGS OF HOOVER TASK FORCE

The Hoover task force found that no agency considered the other as existing at all. In Honolulu, the Army had just opened a new 1,500-bed hospital despite the fact that an adjacent Navy hospital was more than adequate to care for all servicemen in the area. In still another instance, the Veterans Administration was letting bids for a hospital to be built right next door to a Navy hospital only 10 per cent occupied by Navy patients. Senseless duplication of physical facilities, waste of scarce medical personnel and a general lack of integration were apparent in every area surveyed by the investigators.

As a result of the findings of its task force, the Hoover report recommended a unified medical administration over the large-scale activities of the Federal government in the fields of medical care, medical research and public health.—*Insurance Economic Surveys*, July, 1949.

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## U. S. BECOMING WELFARE STATE, BYRNES FEARS

Former State Secretary James F. Byrnes said here today that some of the suggested new Federal programs "point inevitably to a welfare state. We are going down the road to stateism," he said. "Where we will wind up no one can tell. But if some of the new programs seriously proposed should be adopted, there is danger that the individual—whether farmer, worker, manufacturer, lawyer, or doctor—will soon be an economic slave pulling an oar in the galley of the state."

The former Cabinet member said: "Too many people are trying to transfer power to the government. We are not only transferring too much power from the individual to the government, but we are transferring too many powers of state governments to the federal government."—*Chicago Tribune*, June 19, 1949.

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\*Neo-Antergan is the registered trade-mark of Merck & Co., Inc. for its brand of pyranisamine.

1. Brewster, J. M., U. S. Naval Med. Bull. 49: 1-11, January-February 1949.

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# You and Your Business

## HIGHLIGHTS OF THE MID-SUMMER SESSION OF THE COUNCIL

July 7-8-9, 1949

- Monthly financial reports and bills payable were presented by A. S. Brunk, M.D., and approved.
- The report of the Treasurer, plus the semi-annual authenticated report on MSMS bonds, was presented by A. S. Brunk, M.D., and approved. The sale of bonds requisite to purchase a building to house the Michigan State Medical Society offices, provided present negotiations are satisfactorily consummated, was authorized.
- Committee reports were accepted from the Iodized Salt Committee, from the Rheumatic Fever Control Committee including progress report of Director Leon DeVel, M.D., and from the Special Committee on Education.
- The Michigan Health Council's proposed study of health resources and needs was presented, thoroughly discussed, and approved.
- Progress report on the Survey of Rural Health Needs, sponsored by Michigan State College—Michigan State Medical Society—Michigan Foundation for Medical and Health Education, was presented by the Public Relations Counsel.
- The minutes of The Council's Standing Committees (Publication, County Societies, and Finance) were presented and action taken on the individual items.
- A joint meeting with members of the Michigan State Board of Registration in Medicine was held to discuss changes in the Medical Practice Act, and the possibility of an annual re-registration bill. An MSMS Committee, to meet jointly with a committee of the Michigan State Board of Registration in Medicine to study proposed recommended amendments to the Act, was authorized and appointed (P. L. Ledwidge, M.D., Detroit, Chairman, J. D. Miller, M.D., Grand Rapids, and E. F. Sladek, M.D., Traverse City).
- The Annual Report of The Council was read, corrected in several sections, approved, and referred to the House of Delegates.
- The annual joint meeting with the State Advisory Council of Health was held and mutual problems were discussed.
- The monthly progress reports of the President, the President-Elect, the Secretary, the Editor, the General Counsel, and the Public Relations Counsel were presented and accepted.
- Ubiquitous Hosts and Discussion Conference Leaders for the 1949 MSMS Annual Session were appointed.
- The Council invited all county medical societies, which have not appointed Mediation Committees to date, to do so at the earliest possible date.
- Annual Reports of all MSMS Committees were referred to the House of Delegates (to be printed in the Handbook for Delegates).
- The Council authorized the appointment of a sub-committee of the MSMS Child Welfare Committee to aid in the program of hearing conservation, upon request of the Bureau of Child Welfare of the State Department of Health.
- The Constitution and By-Laws of the newly formed Michigan Medical Assistants Society were approved, after study of and recommendation by the General Counsel.
- A Committee of The Council was appointed to carry on co-operation and investigation with representatives of labor, industry, small business and farm groups concerning health insurance plans (P. L. Ledwidge, M.D., Detroit, Chairman, A. S. Brunk, M.D., Detroit, L. Fernald Foster, M.D., Bay City, and O. O. Beck, M.D., Birmingham, Ex-officio).
- After a preview of the new MSMS movie "To Your Health," The Council voted approval of same and congratulated and thanked the Sub-Committee on Cinema of the Public Relations Committee for developing this excellent motion picture.
- The annual joint meeting with members of the Michigan Crippled Children's Commission resulted in a discussion of five items including revised fee schedules of the Commission and the legal provision that payment to physicians is

*(Continued on Page 1094)*

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Wherever your pollen-sensitive patient spends his vacation, TRIMETON\* may add to his enjoyment and rest by alleviating his symptoms of pollinosis. TRIMETON is an unusual antihistaminic. Essentially different in chemical composition, it is so potent that only one 25 milligram tablet is usually required to attain the desired relief in fifteen to thirty minutes. Best of all, your patient isn't likely to sleep away his vacation because the small milligram dosage lessens side effects.

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## HIGHLIGHTS OF THE COUNCIL

*(Continued from Page 1092)*

governed by the 60-day billing clause—and that doctors are penalized by the loss of their fees for failing to bill promptly; further that the statutes limit payment to doctors of medicine for medical services rendered only in approved hospitals (of which there are 126 in Michigan).

#### COMMITTEE OF THE NATIONAL ACADEMY OF SCIENCES OF THE INVESTIGATION OF CORTISONE

The recent publication by Hench, Kendall, Slocumb, and Polley of the dramatic effectiveness of the adrenal cortical steroid, Cortisone (first isolated by E. C. Kendall), in the treatment of rheumatoid arthritis has posed an important problem of distributing the very limited amount of that substance which will be obtainable during the remainder of this year. Originally obtained from the cortex of the adrenal gland, it is now being prepared synthetically from a bile acid. While the value of Cortisone in controlling the symptoms of rheumatoid arthritis is regarded as established, much remains to be learned concerning its possible untoward effects, its usefulness in other diseases and the mechanism of its action. It has been decided, therefore, that the small amount which can be made during the last five months of 1949 shall be used only for clinical and experimental research. It will be made available to those investigators who are in the best position to provide the information vitally needed to insure its safe and effective use.

The Research Corporation, a non-profit organization which administers patents in the interest of public welfare and for the furtherance of scientific research, has aided in the development of the synthetic processes for making Cortisone. The Corporation will continue to further the development of these processes and to stimulate research on the mechanisms of action of the Compound. In fulfilling these functions, the Research Corporation has requested the President of the National Academy of Sciences to appoint a Committee on Investigation of Cortisone, with assurance that its recommendations will be accepted as final with respect to all of the available 1949 supply.

The membership of the committee, appointed with the sanction of the Council of the Academy, is as follows: Chester S. Keefer, chairman, Hans T. Clarke, E. A. Doisy, Robert F. Loeb, C. N. H. Long, E. K. Marshall, Jr., Joseph T. Wearn. David E. Price has been appointed by the Acting Surgeon General to act as liaison between the committee and the U. S. Public Health Service.

The committee is planning arrangements designed to utilize to the fullest possible extent the resources of the National Research Council and the information and advice of experienced and competent investigators in the United States and Canada. Not only will the fields of rheumatism and other diseases for which relief may be anticipated continue to be investigated, but also fields of

physiology and pharmacology which are basic to fuller understanding and further advance.

While the Academy has no funds with which to buy Cortisone or to support investigations, it is confidently expected that the needed funds will become available from both public and private sources.

The Academy committee has accepted this responsibility because of the deep conviction that a new discovery of the greatest importance to the health and welfare of countless people has been made and that it is vital to promote its most rapid and intelligent development.

Applications for a supply of Cortisone must be submitted on a form that can be obtained from the chairman of the committee, Dr. Chester S. Keefer, 2101 Constitution Avenue, Washington 25, D. C. It must be emphasized that consideration will only be given to requests from institutions where adequate facilities for investigation and clinical control are available.

#### SHORT TERM DUTY AVAILABLE FOR ARMY MEDICAL RESERVISTS

The Department of the Army has just published Special Regulation 140-210-10, which authorizes commanders of Army installations to place volunteer reserve officers of the Medical, Dental, and Veterinary Corps on active duty for periods of from one to twenty-nine days a month, but not more than ninety days of active duty in a fiscal year. Officers selected will be placed on active duty in the grade in which currently commissioned in the Officers' Reserve Corps.

Publication of the new regulation is a result of the encouraging response to questionnaires mailed to reservists last May in a nation-wide survey conducted by Major General R. W. Bliss, the Surgeon General of the Army, asking physicians, dentists, and veterinarians if they would be available for short tours of duty to help relieve the critical shortage of these professional personnel. Approximately 2,000 favorable replies have been received as of June 30.

Active duty will be performed at an Army installation or activity situated within the vicinity of the officer's home. No officer will be ordered to active duty where travel to duty station is involved. However, authorization whereby officers may volunteer as ship's surgeon on an Army transport for a round-trip voyage is given in the regulations.

Names of officers who have indicated a willingness to serve have been mailed to the senior Army instructor, Organized Reserve Corps, in the state of residence, who will mail application blanks and copies of the regulations to each officer concerned. Completed forms will be returned to the senior instructors for action.

Many concrete suggestions by reserve officers were received with the returned questionnaires. A plan which may solve the inadequate staffing of transports was submitted by twenty reserve medical officers who propose to man medical installations in the New Orleans area on a staggered schedule, including filling the job of ship's surgeon on Army transports using New Orleans as a port of embarkation. An effort is being made to have the plan generally adopted.

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*Month of October:*

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# Cancer Comment

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## CANCER EDUCATION

In spite of the vast quantities and diversity of material that have been produced for lay education in the field of cancer control, there are still but two fundamental objectives to this program: (1) to tell the public that the great majority of early cancers are curable when treated properly, and, (2) to encourage periodic examinations.

There is little else to the cancer control story. Professional and lay efforts should be directed to this truth simply and effectively emphasized and re-emphasized until every physician, dentist, nurse and intelligent layman comes to accept it as the corner stone of cancer control.

Telling this simple truth once may have but little effect. Like all other educational efforts it must be repeated over and over in order to plant it firmly in both lay and professional minds. The telling of this story should utilize a far greater share of available cancer funds than is now the case. It has been well said that "we can't spend too much money telling that early cancer is curable in the majority of cases. This is the only way that we can cut down the mortality from cancer at the present time."

Methods will vary; media may change; but no matter how elaborate the program or profuse the materials used, a few simple facts that everyone should *know* about cancer and a few simple things that everyone should *do* to protect himself constitute the layman's chief weapons against this menace. Everyone should know that:

1. Cancer is an abnormal growth of body cells
2. Cancer is neither contagious nor hereditary
3. In many cases, cancer is curable
4. Surgery, x-rays and radium are the only recognized methods of treatment

Having learned these simple facts about cancer, everyone should:—

1. Be examined at periodic intervals by his own physician so that cancer, when present, may be found in the early and curable stage and the patient placed under prompt and proper treatment. This applies particularly to men and women after age thirty-five or forty.
2. Learn the following signs of early cancer and,

when recognized in himself, seek prompt medical attention:

- (a) A single painless lump in the breast
- (b) Unnatural bloodstained discharges from natural body openings
- (c) Sores that do not heal promptly
- (d) Persistent indigestion
- (e) Sudden changes in size, shape or color of moles or warts
- (f) Persistent hoarseness
- (g) Changes in bowel habit

It takes just two persons to control cancer: the patient and his physician. *What* these two do and *when* they do it will determine the outcome of each case. Once the patient places himself in the hands of his physician, his remaining contribution to his own welfare is to co-operate fully in all procedures that may be indicated. With such co-operation, the major responsibility then lies with the physician in charge of the case.

Physicians can do effective lay education in their daily contact with patients by stressing the facts presented above and especially by offering periodic examinations to detect cancer in its early stages. The Hillsdale Plan for Tumor Detection has demonstrated its educational value to the physicians and the community as well as protection to the one examined.

In many areas, emphasis and funds have been centered on personal service to the cancer patient more than on the educational program. Desirable as many of these services are, they offer little or no help in reducing the future need for them. Only education of the public to guard against the development of cancer and its recognition in early stages will eventually lessen the demand for such services.

It is wise leadership that keeps the fundamental needs of cancer education always in view and does not dissipate time, energy or funds in non-productive efforts that lead into blind alleys of little personal or community benefit.

## PROGRAM FOR FIRST MICHIGAN CANCER CONFERENCE COMPLETE

The program for the first Michigan Cancer Conference to be held at the Hotel Olds, Lansing, on October 11, 1949, is virtually complete.

(Continued on Page 1098)



# Essential food factors

Several decades ago, vitamins, minerals, and other noncaloric but useful components of the diet were known as "accessory food factors." Today, it is recognized that these *accessory factors* are in fact *essential factors*.

Hypernutrition aids the recovery process and tends to hasten tissue repair. Vitamin A, vitamin D, thiamine (B<sub>1</sub>), riboflavin (B<sub>2</sub>), niacinamide, ascorbic acid (C) and folic acid have enjoyed wide usage for convalescent and reparative states.

*Lederle* has consistently advocated such use of the vitamins.

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## PROGRAM FOR FIRST MICHIGAN CANCER CONFERENCE COMPLETE

*(Continued from Page 1096)*

Registration will be from 10:00 to 10:30 a.m. The program will begin promptly at 10:30 with Norman F. Miller, M.D., Chairman, Cancer Control Committee, Michigan State Medical Society, Presiding. The morning session will have five short talks as follows:

A. E. Heustis, M.D., Commissioner, Michigan Department of Health, will speak on "The Cancer Problem in Michigan."

A. A. Humphrey, M.D., Battle Creek, member of the Cancer Control Committee, will report on "Programs for Early Detection of Cancer."

A. W. Strom, M.D., Hillsdale, will describe "The Hillsdale Plan in Action."

Mr. Don Johnson, Flint, Past President, Michigan Division, American Cancer Society, will discuss "The Layman's Interest in Cancer."

Norman F. Miller, M.D., will propose a "State-wide Cancer Control Program."

During luncheon, questions will be invited on the morning talks and related cancer problems in Michigan. It is expected the meeting will adjourn by early afternoon.

It is hoped that each county medical society will be represented by its officers and cancer committee chairman.

### POTPOURRI

The making of every physician's office a cancer detection unit, exemplified by The Hillsdale Plan for Tumor Detection, is spreading rapidly to other states. The Cancer Control Committee receives frequent inquiries about this Plan from widely separated parts of the country. This program brings the detection of cancer into the office of the family physician and arouses an added interest in the subject by the great mass of the medical profession.

Various methods are being employed to satisfy this interest. Michigan physicians are well aware of the Michigan Cancer Bulletin which has been going to them regularly for the past three years. Volume II of this Bulletin lays particular stress on differential diagnosis of cancer in various sites.

Cancer teaching days, of which the annual Cancer Day in Flint is an outstanding example, are held under local medical auspices in many parts of the state.

A refresher course held at the University Hospital last January, for which twice as many applications were received as could be admitted, will be repeated during this next school year.

The Cancer Day program following the annual meeting of the Michigan State Medical Society in Grand Rapids in September promises to contribute materially to the family physician's ability to recognize cancer in his own patients.

In Denver, Colorado, each July, physicians to the number of 700 from the adjacent area gather for a two-day cancer education program given by scientists of national prominence.

In Tennessee, a physician with several years' postgraduate training in cancer diagnosis and treatment is devoting his full time over a three-year period to teaching local medical groups about the newer developments in the cancer field.

The above are some, but by no means all, the ways being employed to increase the physician's awareness of the rapid developments in the cancer field.

\* \* \*

Statewide interest in the periodic medical examination to detect cancer in early stages has caused the Cancer Control Committee to call the First Michigan Cancer Conference to discuss the Hillsdale Plan and its application to all counties in the state. The program appears in the preceding column. Enough responses have been received from statewide organizations interested in health to insure a successful meeting. In holding this meeting, Michigan physicians are giving another demonstration of their constructive interest in the health problems of their communities.

\* \* \*

From latest reports, the 1949 goal of more than \$14,000,000.00 set up by the American Cancer Society has been oversubscribed in many states. Forty per cent of the amount collected is sent to the national headquarters of the society. States use their 60 per cent in different ways. In Michigan, 50 per cent of the funds are spent in the county where collected under direction of a local program planning committee. There is medical representation on each county committee, so physicians have a responsibility in seeing that the local program contributes in the largest possible way to solution of the cancer problem.

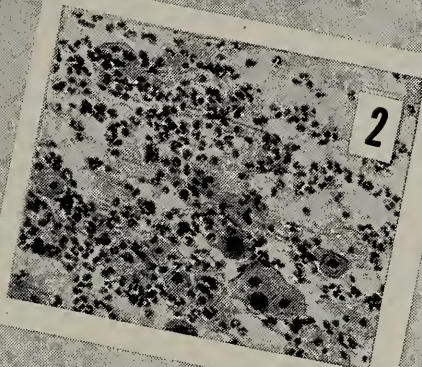
As education of all groups of high school age and over offers the greatest hope for ultimately

*(Continued on Page 1102)*



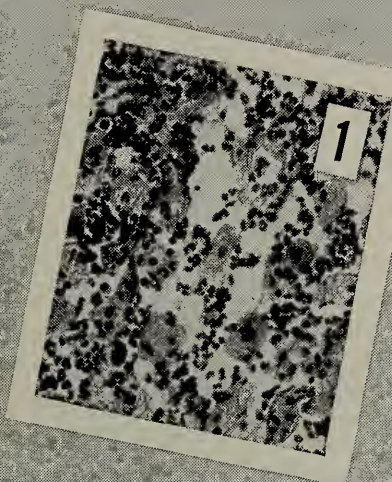
Untreated menopause. Epithelial cells are relatively small, large nuclei predominate; bacteria, leukocytes, free-floating nuclei and other debris cloud the smear picture.

1



2

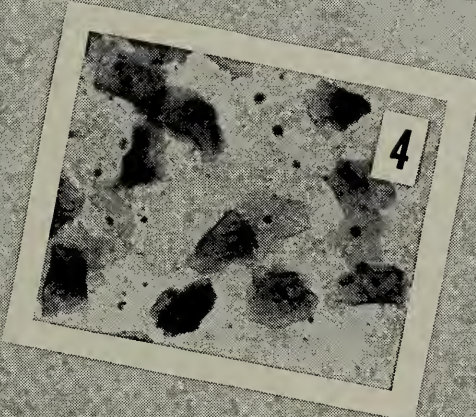
2 & 3 Smears showing progressive improvement during estrogen treatment. The picture is beginning to clear. The cells are enlarging and becoming more discrete.



1



3



4

4 Smear showing effects of full estrogen replacement. The smear is clean and free of leukocytes indicating restoration of a normal vaginal epithelium.



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ESTROGENIC  
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For action with little or no side action in control of menopause and certain other ovarian disorders.

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# PR In Practice

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## **MSMS Speakers Conference Provides Another Step Forward**

Under the direction of Paul R. Bagwell, one of the nation's outstanding public speakers and Professor of Spoken English at Michigan State College, the first MSMS Speakers Conference held in Grand Rapids on Thursday night, September 22, proved to be another step forward in the fight against socialized medicine.

Conducted as one of the educational features of the 84th MSMS Annual Session, the Clinic attracted more than 150 physicians and their friends for the five and one-half hour period. The Conference opened at 5:00 with a didactic program, followed by dinner at 7:30. Following the dinner session the members reassembled for a two-hour period of laboratory speech examination.

The MSMS Speakers Conference was born as a result of repeated requests from many Michigan physicians for the opportunity to learn the rudiments and techniques of effective platform speaking and how to make a Speaker's Bureau effective locally. Under Professor Bagwell's capable direction this initial gathering provided an excellent occasion for learning speech preparation and delivery preparatory to renewed vocal efforts against socialized medicine requisite next autumn and winter.

Much of the credit for the success of the conference goes to L. Fernald Foster, M.D., MSMS Secretary, who functioned as chairman for the evening's activities.

## **Development of Local Speech Conferences Urged**

The success of the recent statewide Speakers Conference has resulted in a demand for like meetings in local medical society areas, according to L. W. Hull, M.D., Chairman of the MSMS Special Committee on Education.

"The intensified CAP activity that will of necessity come with the autumn months indicates that every county medical society should do all in its power to train and develop capable public speakers," Dr. Hull said. "The pattern established by Professor Paul Bagwell, Director of the meeting on September 22, could well be followed in nearly

all our component groups. Each should plan a Speakers Conference for an evening and invite the aid of those prominent speakers in the community, whether professional or lay, in the preparation of and conduct of the school. Arm your members with the facts and the principles of good platform appearance and presentation. Once this is done you have laid the proper foundations for an extremely active, effective and profitable speakers bureau."

## **MSMS Socialized Medicine Movie Completed**

Michigan State Medical Society's second motion picture, "To Your Health," has been completed and at present has started its run in many of the 400 commercial theaters in Michigan. "To Your Health" is a ten-minute film depicting some of the pitfalls of socialized medicine and according to preview audiences is one of the most potent weapons yet devised in this fight.

"To Your Health" was produced by the Jam Handy Organization, producers of the first MSMS film "Lucky Junior" which today is still being shown in theaters throughout the nation. Medical supervision of both scripts has been supervised by the MSMS Cinema Committee under the Chairmanship of Arch Walls, M.D., Detroit.

Copies of the new film in 16 mm. size are available for showing to county medical societies. Orders for the picture should be addressed to the MSMS office, 2020 Olds Tower Building, Lansing 8, Michigan.

## **New Jersey Joins States Using "Tell Me, Doctor"**

The parade of States using the popular "Tell Me, Doctor" radio series developed by the Michigan State Medical Society continues; the state of New Jersey is the latest to join the ranks. Through its Executive Officer, James E. Bryan, the Medical Society of New Jersey has requested all pertinent information regarding the program and within a short time will be airing the five-minute healthcast.

The Oklahoma State Medical Association has recently reordered the series while a new twist is being used by the Tompkins County Medical So-

*(Continued on Page 1102)*

30-DAY TEST REVEALED

*“Not one single case of  
throat irritation due to  
smoking CAMELS!”*



Yes, that's what throat specialists reported after making weekly examinations of the throats of hundreds of men and women from coast to coast who smoked Camels, and only Camels, for 30 consecutive days.



R. J. Reynolds  
Tobacco Co.,  
Winston-Salem,  
N. C.

*According to a Nationwide survey:*

*More Doctors Smoke CAMELS  
than any other cigarette*

Doctors smoke for pleasure, too! When three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!



## New Jersey Joins States Using "Tell Me, Doctor"

(Continued from Page 1100)

ciety, Ithaca, New York. This organization has requested use of the scripts rather than the recordings and will take to the air with members of their local medical society in the cast supplemented by local radio talent.

## MSMS Members Meet Congressional Climaxes in Full Stride

The climactic activities of the 83rd Congress have resulted in numerous appeals to members of the MSMS for action respecting pending bills and amendments. The result of these urgent appeals is contained in a message of thanks from O. O. Beck, M.D., Chairman of The Council who says "We are truly grateful to all of you who responded so well when we asked for action on certain bills in Washington. We particularly appreciate the telegrams relative to the President's Reorganization Plan Number One and for all your efforts in regard to H.R. 2893, a measure which would have brought all self-employed into the Social Security taxing system. With teamwork like this there is no doubt but what we can continue to keep American medicine unfettered and the finest in the world."

## Woman's Auxiliary Program Stimulated Through Summer Bulletin

The excellent activity of the Woman's Auxiliary to the Michigan State Medical Society was further emphasized during the past three months through publication of a monthly Bulletin. The four-page booklet, prepared by the MSMS Public Relations Department, under the direction of Mrs. Robert S. Breakey, Auxiliary Public Relations Chairman, was mailed to each member of the Auxiliary.

Editorial contents of the Auxiliary organ were directed towards the part the doctor's wife can play in the CAP program. Emphasis was placed on those activities being carried out by various groups throughout the state and to those plans made by other groups for future work. Additionally the Bulletin carried news notes and ideas from successful education programs in other states. The third issue contained a comprehensive chart outlining the year-round accomplishments of each Auxiliary in the various fields of endeavor entered by the state and local groups.

## Socialized Medicine Material Ordered Is Indication of Individual Activity

A fairly accurate barometer of the individual activity in the CAP program is the extent to which individual physicians re-order materials from the supplies available from both MSMS and the AMA. Reports are being received daily telling of new and different uses for the various posters, pamphlets, and stickers.

How are you aiding in the education of your patients and friends through printed materials? How is your present stock of supplies? Please order from the following list any quantity you feel you can profitably use:

Number 17—"Government Medicine in New Zealand"—Its social, economic and political implications.

Number 18—"Compulsory Health Insurance"—this is the first of the AMA series and is much like the valuable "Uncle Sam, M.D."

Number 24—"The Voluntary Way is the American Way"—Fifty questions and answers.

Number 25—"Your Medical Program—Compulsory or Voluntary?"—A comparison of compulsory and voluntary health insurance.

Stickers—Colorful gummed labels for use on stationary, et cetera. This method of message carrying is particularly liked by many doctors.

## CANCER COMMENT

### Potpourri

(Continued from Page 1098)

controlling cancer, such programs should be emphasized as of primary importance in all local projects for the use of cancer funds. People must learn the facts about cancer and what the individual can and must do to protect himself. There is no other approach to a solution of this problem except through a great extended and intensified educational program.

\* \* \*

Almost daily, newspapers report tests for cancer for which simplicity and unwarranted accuracy are claimed by their originators. New and unproved methods of treatment are also exploited through the same media. All this disservice to humanity is further complicated by the willingness of some physicians to exploit these announcements as being of accepted value in the diagnosis and treatment of malignant disease.

In such instances the restraining hand of the Committees on Ethics should be applied in no uncertain manner. Cancer is too serious a problem to be cruelly exploited by those who are physicians in name only.

# delayed diagnosis

is enemy number one of

# DIABETICS

A million or more diabetics are undetected and untreated.† But only about 55,000 new cases are being discovered each year in the course of insurance examinations and routine checkups. Early diagnosis and prompt treatment give the physician his best opportunity to ameliorate the disease and to avert or delay its complications.

## An urgent problem

How shall the unknown diabetic be detected and directed to the doctor's office for diagnosis and proper treatment?

## An important answer

# AMES Selftester\*

a quick home screening test that brings those with glycosuria to you for diagnosis

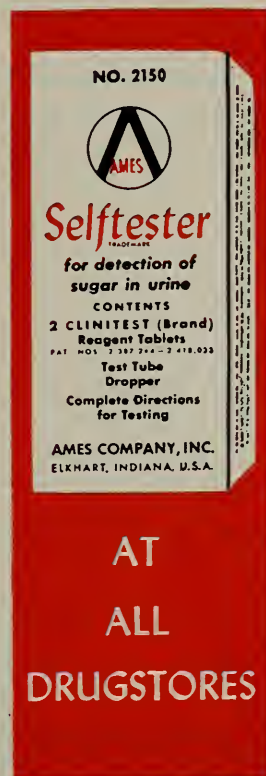
The Ames Selftester for detection of sugar in urine is approved by the Council of the American Diabetes Association. It is a simple, reliable screening test to establish the presence or absence of urine-sugar and "refer" those with glycosuria to you for diagnosis.

### The directions state:

1. The Selftester does not diagnose diabetes or any other disease. Its sole function is the detection of sugar (glucose) or sugar-like substances.
2. If reaction is positive, see your doctor at once. Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell you why you show sugar.

† Wilkerson, H. L. C. and Krall, L. P.: Diabetes in a New England Town, Journal of the American Medical Association, 135:209 (Sept. 27) 1947.

\* Ames Selftester —TRADE MARK



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# Highlights from Under the Bushel

By L. W. Hull, M.D.

Chairman, Special Committee On Education

## EDITORIAL BOUQUETS TO:

James J. Lightbody, M.D., Energetic new President of the Wayne County Medical Society who deserves rich praise for his two guest appearances at recent Detroit meetings of the Detroit Optimist Club and Kiwanis No. 1 . . . reports indicate his speeches were well received and remembered . . . credit also to C. L. Candler, M.D., of Detroit for his activity in connection with both veterans and service clubs . . . Many additional resolutions have been received in the MSMS office testifying to continued activity on the part of all in the CAP program . . . J. W. Evers, M.D., of Flint continues to add names to his list of "20"—are you? . . . Councilor C. A. Paukstis, M.D., did yeoman work in organizing doctors and their wives in the Ludington area for combat against President Truman's Reorganization Plan Number One—Our hat is off to you . . . Otto Vandervelde, M.D., President of the Ottawa County Medical Society, is putting his spare time to good use: he distributes copies of pamphlets to friends as he travels the streets to and from his office . . . also slips them into the seats of all parked cars . . . Another physician working closely with dentists and other professional groups is Councilor E. A. Oakes, M.D. of Manistee . . . Another idea for distributing of literature comes from M. A. Hoffs, M.D., Lake Odessa, who has overcome a natural apathy by constructing a box for use in his office—in it he places his small pamphlets and the Box reads "Take One, Free" . . . Congratulations to Wayne County CAP Committee for its attractive and informative weekly hospital bulletin—enables Doctors to be contacted at a point of great professional interest . . . Dual honors to Dr. and Mrs. A. B. Aldrich of Houghton for their inspired leadership and activity—at present they are taking charge of distributing literature to all drug stores in their area . . . Dr. Scott Moore of Niles is hard at work interesting employers in placing pamphlets in their pay envelopes . . . Single out young E. S. Oldham, M. D., of Breckenridge for his efforts in sparking the work in Clare-Gratiot-Isabella Counties—he and his fellow workers have big plans

for the fall . . . the perennial CAP enthusiast Hugo Aach, M.D., of Kalamazoo has come through again with the placing of the large Fildes poster in local bank lobbies and railroad stations . . . Although he was a patient in one of Muskegon's hospitals, R. J. Douglas, M.D., still followed through with several ideas regarding legislative action—it's hard to keep a good man down . . . The physicians of St. Joseph County led by Sam A. Fiegel, M.D. as President, are doing a commendable job in community relations . . . held a recent meeting for community leaders and secured enthusiastic pledge of aid for future efforts . . . Many others are still hard at work keeping up the fight against socialized medicine—and the fight has only begun—the new session of congress will see renewed attempts to destroy all you have labored so long and diligently for . . . Tell us about your plans to win this battle and we'll tell readers of THE JOURNAL.

L. W. HULL, M.D., *Chairman*  
Special Committee on Education

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Care should be taken to avoid sentimental or emotional appeals for money or interest in cancer. Such appeals soon become stale and are, therefore, ineffective.

\* \* \*

Cancer can no more be controlled by sentiment than a given case of cancer can be cured by love and good wishes.

\* \* \*

A deeper knowledge of cancer, far from accentuating the fear inspired by this disease, is the best means of allaying it.

\* \* \*

Sixty per cent of cancers in the human body can be recognized by a physician in an office examination.

\* \* \*

Youth does not preclude the presence of carcinoma of the colon.

\* \* \*

A rectal proctoscopic and sigmoidoscopic examination should be as much a part of the routine of a physical examination at any age as an inspection of the nose and throat or taking a blood pressure reading.

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# Editorial Comment

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## "UNNECESSARY HUMAN SUFFERING"

In his three thousand word report, President Truman *re* his ten-year health program stressed compulsory health insurance and indicated that this is necessary to end "unnecessary human suffering."

Even an intelligent layman knows that much of the total load of human suffering is psychological and not in any way connected with physical ills—not amenable to medical care.

Particularly should the layman who has reached the highest office within the reach of the United States citizen be able to appreciate the psychological strain placed upon the citizenry by a profligate government moving toward totalitarian policies with taxes already ten per cent higher than the limit for survival.

The people endowed with average intelligence know that the quickest and surest way to lighten the heavy load of "unnecessary human suffering" is to end the New Deal.

A check of the Federal government's present medical load would show that the mounting neuropsychiatric phase has long since outstripped the physical. In this country we have moved along with our so-called civilization only to find that sniping bureaucrats are much harder on the nerves than mauling Indians.

How healthful and how helpful it would be if Mr. Truman would show some disposition to clean house and cut costs.—Editorial, *Journal Oklahoma State Medical Association*, August, 1949.

## KEEP THE SOCIALIZERS ON THE DEFENSIVE

Each month we publish a complete report of the activities of Blue Shield, the Nebraska Medical Service. With the report comes a section under the heading, "Know Your Blue Shield," which supplies pointers on the functions and operations of this important organization. The monthly reports indicate steady, uninterrupted progress in the growth of Blue Shield. This progress is the result of untiring efforts of the officers and employees of NMS, the former voluntarily contributing their time and energy and enthusiasm to stimulate the latter to

productive achievement and thus enhance the scope of Blue Shield.

Students of Medical Economics are convinced that the more people actively participate in medical service plans the less likely are the prospects of our being bureaucratized, because if these plans continue in their spread and cover large areas there will be neither need nor desire for medical socialization. Thus the public and the doctors alike will benefit from expansion of these plans.

It is doubtful that the present session of Congress will pass upon President Truman's recommendation for compulsory health insurance, according to those in the "know" in Washington, but everyone concedes that should the Voluntary Plans slow down their pace, the advocates of the paternalistic program will consider themselves blessed with a most potent weapon to be utilized in their own propaganda against us when time and circumstances warrant.

The success of the Voluntary Plans has put the national socializers on the defensive. Let us keep them there.—Editorial, *The Nebraska State Medical Journal*, August, 1949.

## GOVERNMENT'S MEDICAL PROGRAM

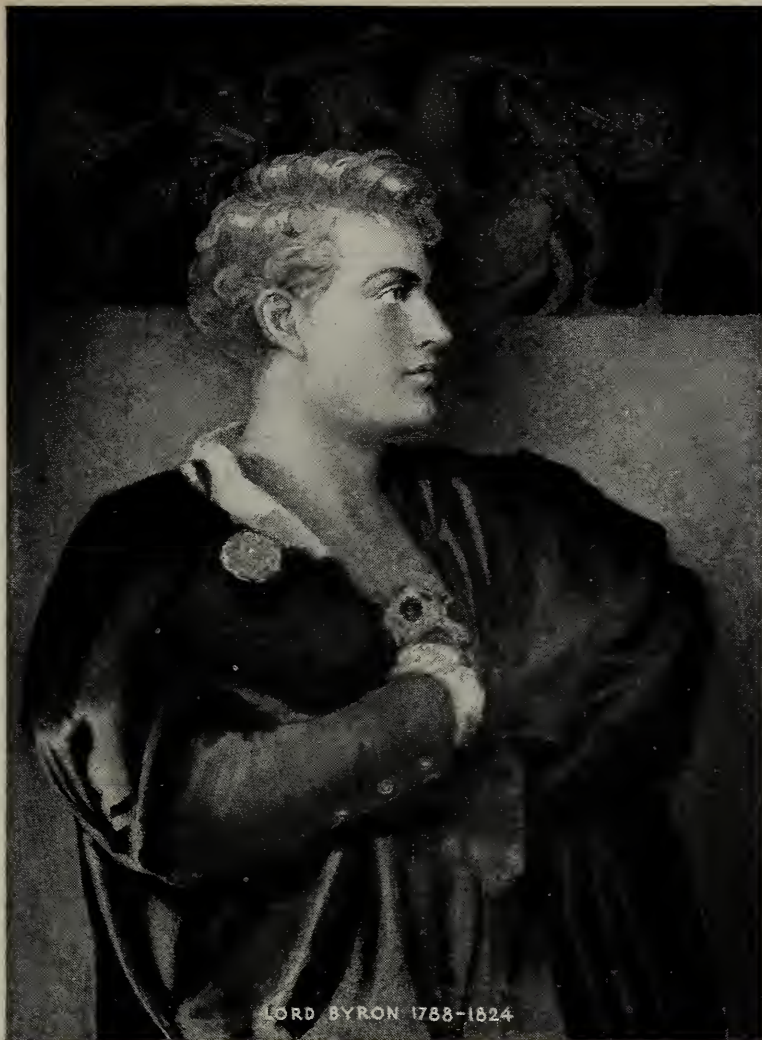
There may be some question as to whether the federal government's medical program will be enacted this year.

Let there be no doubt, however, that eventually there will be some such bill. Both political parties are committed to it; under the Wagner-Murray-Dingell Bill and under the Taft Bill.—We both need to change our tactics. We must seek to direct the change into the best channels; channels in the interest of public welfare, for one of our greatest assets is medical progress.

The price of government in Great Britain is 40 per cent of all incomes; much more of the incomes of the successful and energetic, killing the motive power that keeps it alive.

The amount of our own national income being taken by federal, state and local governments is about 25 per cent. Some may think that this is moderate compared with the more clearly ruinous British 40 per cent.

It is, in fact, dangerously excessive. The British still have part of their capital deficiency made up for them by our ERP. No one will do that for us.—Editorial, *Guildcraft-The Magazine of Ophthalmic Dispensing*, June, 1949.



★ *Epileptic Men of Genius* ★

The brilliant English poet, Lord Byron, who had many mild convulsive attacks during his short life, is an outstanding example of the fact that epilepsy need not cloud a man's mentality.

Comparative studies have shown that in some cases better control of grand mal as well as petit mal seizures can be obtained with Mebaral than with corresponding doses of other antiepileptic drugs. Mebaral produces tranquillity with little or no drowsiness. It is particularly desirable not only in epilepsy but also in the management of anxiety states and other neuroses. The fact that Mebaral is almost tasteless simplifies its administration to children. Average dose for children  $\frac{1}{2}$  to 3 grains, adults 3 to 6 grains daily. Tablets  $\frac{1}{2}$ ,  $1\frac{1}{2}$  and 3 grains.

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# Michigan Medical Service

## HOW VETERANS LIKE HOME TOWN MEDICAL CARE PROGRAM

We have recently started a survey among veterans who have received services through the Michigan Medical Service Home Town Care Program. Five thousand cards or more are being sent to veterans who have received services, asking them to comment on this program.

We have asked the veterans to indicate whether or not the Home Town Care Program is entirely satisfactory and specifically, "How do you like this service as compared with the other types of medical care through which you have received treatment?" The following is a list of some of the typical replies:

"I am fully in favor of this type of treatment. It is very convenient, and sets a person more at ease."

"The confidence in the doctor of your own choice, plus no veterans mile-long line-up make this service ideal."

"It is dependable and complete. Takes worry out of illness."

"I appreciate this service very much. It's about the best and the fastest service I know of."

"I like it very much. Keep up the good work."

"By far superior—immediate attention—Best of service. I thank you."

"It enables me to make my appointments without interfering with my work. No waiting time."

"A job well done."

"I like this service much better, in fact I really enjoy being treated."

"As good as any private medical care I have ever had. Better than the mass production care I have received elsewhere and in the Army."

"This service is the very best. I have a family and cannot miss the time I would have too to report to a hospital."

"I believe it is one of the best ways for a veteran to receive treatment that has ever been set up."

"This is the best medical care I have received and I have the best doctor in Detroit. Never have to wait."

"It has been very convenient as I have been able to get treatment at any time. Please continue the system."

"In my opinion, this type of service is the best possible."

"Have received the same care that I did when I could pay my own way."

"I am completely satisfied with this care. I find that my treatments are more carefully taken care of with no waiting."

"I am very well satisfied. The Doctor I selected has been very co-operative. Both he and Michigan Medical Service have my sincere thanks."

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# The JOURNAL

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## Rheumatic Fever and Rheumatic Heart Disease in Children

### *Diagnosis and Treatment*

By Leo M. Taran, M.D.

New York, New York

RHEUMATIC FEVER continues to present one of the major diagnostic and therapeutic problems in medicine. While the classical manifestations of this disease have been amply described in the literature, it must be admitted that these constitute only a small portion of the entire natural history of the disease. Polyarthritis and chorea are well known. On the other hand, the most common, the most insidious, the most damaging, and the most frequently misdiagnosed manifestation of rheumatic disease, namely, carditis, has thus far escaped the formulation of clear-cut diagnostic criteria. Students in rheumatic fever feel that seven out of every nine cases of rheumatic carditis are missed in the early stages of the disease, and some feel that mild protracted carditis continues for weeks and months beyond the acute and easily recognizable phase. Since, therefore, no clear-cut criteria have been evolved to screen early carditis and mild protracted carditis, no consistent therapeutic regime has been established for this phase of the disease.

In the past ten years, detailed observations on large numbers of children with acute rheumatic heart disease were made at St. Francis Sanatorium for Cardiac Children under adequately controlled conditions. Actually, more than 5,000 patient years were observed in over 1,500 children. Many important lessons with regard to acute rheumatic

heart disease were learned from this experience:

Of these, the first and most significant lesson learned was that acute rheumatic heart disease is not as clear-cut a clinical entity as one is led to believe from the textbook description of the disease. At both ends of the so-called "classical" or textbook phase of the disease, rheumatic carditis can be shown to be present in a large number of cases. It is evident that acute rheumatic heart disease begins much in advance of the appearance of the accepted clinical and laboratory diagnostic criteria described in the literature and continues for months following the disappearance of the same criteria.

The second lesson learned from our observations was that mild carditis in the subclinical phase, when the usual clinical and laboratory criteria are absent, must be treated with the same concern as the acute explosive phase. Progressive cardiac damage is likely to occur during the smoldering phase of the disease if the patient is permitted to assume normal activities and the disease is regarded as quiescent.

These lessons stimulated the search for further diagnostic criteria of acute carditis in the hope of detecting the presence of early and mild rheumatic carditis and avoiding the error of terminating medical care before actual quiescence sets in.

### History

Early in these studies it became clear that even a most careful history of the patient's illness failed to detect the presence of mild carditis. The history of early rheumatic symptoms alone, such as repeated abdominal pain, epistaxis, migratory muscle and joint pain, varies greatly with the personality of the patient and the temperament of the historian, and cannot be relied upon in screening cases of carditis in the latent and so-called quiescent phases of the disease.

Read in Symposium on Rheumatic Fever, Michigan State Medical Society, Detroit, March 26, 1949.



### Laboratory Evidence

Blood studies, including the sedimentation rate, immunologic studies, and the usual fever curve and pulse rate records are notoriously misleading in both directions. Carditis may exist while the sedimentation rate, blood count, temperature and pulse rate of the patient, anti-streptolysin and anti-fibrinolysin titers are normal. Furthermore, many a child has unjustifiably been convicted of acute carditis because of a low-grade fever and an elevated sedimentation rate.

### Clinical Picture

Pediatricians have long been familiar with the clinical picture of rheumatic carditis. The rheumatic child who retires voluntarily from vigorous physical activity, shows a high degree of emotional instability, and becomes progressively pale without a parallel drop in hemoglobin, usually presents to the trained pediatrician definite evidence of disturbance in cardiac action. The heart action sounds tumultuous; the pulse is labile. Although no evidence of cardiac insufficiency may be present, reaction to usual exercises produces more than usual fatigue. This clinical picture, in our experience, is of great help in detecting early and mild carditis in children. Students of rheumatic fever feel, however, that considerable clinical experience is needed to recognize this clinical picture with assurance.

### Cardiac Findings

Cardiologists, on the other hand, contend that the clinical picture alone is insufficient evidence of carditis. Definite cardiac findings must be present to warrant such a diagnosis.

*Progressive Valvular Damage.*—The presence of progressive valvular disease is, in some quarters, considered as good evidence of the presence of carditis. This is a disputed issue. Some investigators feel that progressive valvular disease may be the result of cicatrization occurring during the period of quiescence. In our experience, progressive endocarditis is, in children and young adults, nearly always associated with acute carditis.

*Progressive Cardiac Enlargement.*—There is unanimous opinion among clinicians that progressive cardiac enlargement in rheumatic children is an unfailing sign of acute carditis. Some rheumatologists feel that a quiescent rheumatic

heart will resist dilatation and hypertrophy whatever the extent of valvular damage. Furthermore, vigorous physical exercises do not increase the size of the quiescent rheumatic heart. Our observations concur completely with these findings. Progressive cardiac enlargement in rheumatic children can always be shown to be associated with acute carditis. This diagnostic criterion, however, has an important drawback. Slight cardiac enlargement is difficult to detect and requires frequent roentgenologic follow-up. And the best x-ray method of studying cardiac size presents a high degree of error.

*Congestive Failure.*—There is no disagreement on the observation that in rheumatic children and young adults the advent of congestive failure occurs only in the presence of acute carditis. We have found no exception to this rule. Congestive heart failure, therefore, even in the absence of all other criteria of acute carditis in the young rheumatic patient, makes the diagnosis of acute heart disease. This diagnostic criterion, however, is a late finding, and therefore misses the vast majority of cases of carditis in children who do not show evidence of congestive failure.

*Refraction to Cardiac Therapy.*—The clinician of twenty-five years ago looked with great concern upon the rheumatic patient who was refractory to cardiac therapy. He suspected that rheumatic activity was present in such cases. There is at present no agreement upon this concept. Some cardiologists are of the opinion that cardiac therapy is a highly specialized form of treatment and therapeutic results are difficult to evaluate. We are very much impressed with the fact that most of the currently proposed forms of cardiac therapy, even when executed in the most meticulous manner, fail to produce the expected results in cases having acute carditis with congestive failure. A poor response to cardiac therapy in rheumatic patients, therefore, may be used as a diagnostic criterion for the presence of acute carditis.

Here again, although this diagnostic criterion can be relied upon in making a diagnosis of acute carditis, it misses the larger number of patients with carditis without congestive failure.

### Electrocardiographic Findings

In recent years this field has been extensively, yet inconclusively explored with the aid of the

electrocardiograph. Considerable difference of opinion, however, exists with regard to the frequency of electrocardiographic abnormalities in patients suffering from acute rheumatic disease. The percentage incidence of electrocardiographic abnormalities ranges from 22 to 100 per cent in various studies.

The evidence presented is, in the main, of three sorts:

1. The duration of the A-V conduction time is increased though not always.
2. There is frequent alteration in the ventricular complex, either the QRS, the S-T segment, or the T wave.
3. Irregularities occur in the cardiac rhythm.

It is pointed out that most electrocardiographic findings are transient and bear no clear-cut relationship to the clinical findings. Some alterations become fixed and cannot, therefore, be used as criteria for active carditis. These findings seem to point to an inadvertent attempt to correlate electrocardiographic findings with the histopathology of rheumatic myocarditis. Few studies take into clear account the pathologic physiology mirrored in the cardiogram in the acutely inflamed heart muscle.

Physiologists have always contended that a disturbance in time relationship of systole and diastole is a manifestation of impairment of the functional integrity of the myocardium. Wiggers and Clough found consistently that the period of systole was of longer duration in functional cardiac disorders. Katz has stated that the duration of the systole in the diseased heart as compared with the normal heart would give a method of determining the functional integrity of the myocardium. Bazette concluded from his evidence that the duration of the systole in the abnormal heart may prove a measure of dilatation.

Although the physiological principals underlying the significance of the disturbance in the electrical sequence of events in the cardiac cycle are clear, there is a wide difference of opinion among clinicians as to the clinical significance of this disturbance.

This discordance of opinion may be explained by the fact that the groups of patients studied by various investigators were not parallel cases. Those who have studied patients with acute myocardial disturbance always were impressed with the prolongation of the electrical systole. On the

other hand, those investigators who examined the electrical systole in patients with structural cardiac defects, but without active myocarditis, found no such prolongation.

Our investigation was made in children suffering from acute rheumatic carditis. This investigation would seem to show that the disturbance in the relationship of systole to diastole in the cardiac cycle is a sensitive diagnostic index of acute carditis. The observations showed that:

1. The duration of electrical systole (QT), both absolute and relative to diastole, was significantly prolonged in all our cases of acute carditis.
2. This prolongation of the electrical systole was found to be a function of the severity of carditis and not that of cardiac rate.

### Summary

In summary, therefore, our experience with acute rheumatic carditis clearly demonstrates that current laboratory criteria which are present during the acute toxic stage of rheumatic disease are inadequate in screening mild carditis in the latent period or in arriving at a decision as to when carditis has finally ceased.

Evidence of progressive heart disease, in our experience, is a certain manifestation of acute carditis, but it is a late finding and therefore misses all the early cases of carditis. The disturbance in the time relationship of systole to diastole, long recognized by physiologists as evidence of the impairment of the functional integrity of the myocardium, is, in our opinion, the most sensitive index of the presence of carditis in rheumatic children in the latent phase and signifies the continued presence of carditis after all other clinical and laboratory manifestations have subsided.

### Therapeutic Regimen

Using these criteria as our diagnostic pattern, we have for some years treated rheumatic carditis in a specific manner. The therapeutic regimen which we evolved is predicated upon the following concepts:

1. Acute rheumatic heart disease is of much longer duration than the clinical symptoms would seem to show.
2. The degree of functional cardiac disability is in the vast majority of patients a manifestation of the severity of the active inflammatory process



in the heart muscle and not a measure of the extent of valvular damage.

3. Adequate and complete care during the active period of carditis not only minimizes the total cardiac damage but also prevents reactivations or recrudescences

### Latent Phase

The latent phase during which the patient does not demonstrate clinical criteria of rheumatic carditis is, in our experience, completely refractory to treatment. All measures proposed to prevent the acute phase were attempted in a significant number of cases but failed to prevent the explosive or acute phase of the disease.

### Acute or Active Phase

*Polyarthritis.*—To limit the early exudative process, salicylate therapy, in our experience, is the treatment of choice. It does not simply modify the symptomatology of rheumatic fever, but distinctly and significantly changes the course of the disease if given in adequate dosage and during the early exudative stage of the disease.

*The point to be stressed is that whatever form the explosive phase of the disease takes, the treatment must be directed toward limiting the exudative process rather than toward the treatment of the organ or set of organs involved.*

*Chorea.*—For the present, the treatment of chorea is entirely symptomatic, and no clear-cut evidence can be obtained to show that by relieving the symptoms of choreas one influences the course of the disease in regard to cardiac damage.

*Carditis.*—Of far greater importance from the therapeutic standpoint is the management of rheumatic carditis. As mentioned above, acute rheumatic disease is first and foremost a disease of the heart; the degree of functional cardiac disability is a manifestation of the severity of the acute inflammatory process in the heart muscle rather than the extent of valvular damage. Thus the management of the acute phase of rheumatic disease is aimed mainly at the treatment of acute carditis and its sequellae.

The forms of therapy which we will discuss are well known but the method and the timing of their application are in some respects new and have been evolved as a result of a ten-year experience with rheumatic carditis in children and young

adults observed under the adequately controlled conditions of a sanatorium.

At the very beginning of this experience, it became obvious that acute rheumatic heart disease cannot be treated as a single entity. It became clear that this phase of rheumatic disease consists of various stages which are distinct in their manifestations and often follow each other in sequence.

In the planning of a therapeutic regimen for the various phases of acute heart disease, we considered three methods of approach:

1. The environment under which the patient is being treated.
2. The nutritional requirements.
3. The specific medication.

*Salicylates.*—In our experience, massive doses of salicylates when administered during the period of invasion may be considered in the nature of a specific form of therapy. When this form of therapy is instituted during the first six weeks from the onset, the acute onslaught of the disease is interrupted in more than 80 per cent of all cases. All clinical and laboratory evidence of activity subside, and the patient makes a complete recovery.

*Oxygen.*—Once the patient has passed the acute stage and has settled down to the protracted smoldering phase of carditis, salicylate therapy no longer produces any therapeutic effects. At this stage of the disease, oxygen therapy is the treatment of choice. Five years of experience with this form of therapy provide convincing evidence to show that:

1. Oxygen therapy given at this phase of the disease diminishes significantly the cardiac overactivity and removes the annoying symptoms of cardiac fatigue.
2. This symptomatic relief enhances relaxation, sleep, nutrition—all of which contribute to a rapid and more satisfactory recovery.
3. The incidence of congestive heart failure in this group is significantly smaller than in the group deprived of this form of therapy.
4. Total cardiac disability resulting from protracted carditis is measurably diminished.

*When the patient begins to present signs of congestive failure, so-called cardiac therapy must be used with great caution.*

*Digitalis.*—We have rarely observed any beneficial effects from digitalis therapy in acute pancarditis with heart failure. Our experience with the use of digitalis in this group of cases would seem

to warn strongly against it. Similarly, when the presenting symptoms of cardiac insufficiency are those of left-sided failure, the depression of the ST segment and inversion of the T wave on the electrocardiogram, as well as premature ventricular contractions, occur early in the course of digitalization, and complete digitalization can rarely be carried out before intoxication becomes manifest. In rare instances in which the patient shows signs and symptoms of almost true right heart failure, digitalis seems to produce desired beneficial effects in some cases.

In our experience, about one out of every two cases with acute carditis with auricular fibrillation can be controlled with digitalis. The other half of the cases continue to be characterized by a fast ventricular rate with a marked pulse deficit in the presence of adequate digitalis therapy. Further digitalis therapy in this group is accompanied by definite cardiographic and clinical evidence of digitalis intoxication.

*Mercurial Diuretics.*—Our experience coincides with the experience of other observers that when mercurials are properly applied, they take the place of digitalis in acute heart disease. During the first two phases of the disease it is of questionable value, but during the phase of depletion of cardiac reserve, it is of specific therapeutic importance. Left heart failure cases can be treated most effectively with the use of mercurials alone. Frequent small doses given intramuscularly must be continued until dry weight is attained, and from then on the patient is placed on a maintenance dose of mercupurin or merchydryn until all evidence of acute heart disease has subsided. It is important to remember that mercurials are continued not only until evidence of congestive failure has disappeared but until all evidence of rheumatic activity is no longer present. This form of therapy may have to be continued for many months.

*Concentrated Glucose.*—The use of concentrated glucose in heart disease has been tried from time to time and has received encouragement from the work of Schwentker and Noel with diphtheretic myocarditis. In animals in whom diphtheretic myocarditis has been produced, the use of concentrated glucose with oxygen seemed to have changed the course in favor of the animal. The physiological explanation is not clear and need not be gone into here.

In our experience, in cases of so-called “irrevers-

ible” heart failure where the toxic element of the disease is high and at the same time the cardiac reserve is extremely low, a few cases are definitely improved by the use of concentrated glucose.

In summary, therefore, it may be said that while the “specific” medication used in this program is old, its method of application is somewhat novel. We are impressed with the fact that *salicylates* are almost a specific form of therapy when used during the stage of invasion. *Oxygen* belongs in the same category if used only in the stage of protracted carditis without heart failure. *Mercurial diuretics* have almost displaced the use of digitalis in acute heart failure. *Digitalis* finds limited use in active rheumatic heart disease but may be tried in cases where the dominant feature is right heart failure. The proposal of the use of concentrated glucose with oxygen and insulin is made with misgivings. It seems that a few of the so-called irreversible heart failure cases do well with this form of therapy.

### Quiescent Phase

There remains the phase of rheumatic fever known as the quiescent phase. In our opinion, it would seem that the treatment of the rheumatic patient in the quiescent state is more of a psychological and emotional problem than a medical problem. For this the co-operation of the various allied health and educational agencies constitute an important part of the community effort on behalf of rheumatic disease.

On the medical side it is our experience that quiescent rheumatic children and young adults are overtreated rather than neglected. Unnecessary prohibitions establish psychological problems more difficult to manage than rheumatic disease itself. There is general agreement that a quiescent rheumatic heart in the vast majority of instances has normal cardiac reserve and the patient need not be limited in any of life's activities.

### Conclusion

In summary, our experience with the treatment of the rheumatic fever patient presents the following observations:

1. The latent period of rheumatic disease remains for the present without effective therapy.
2. The acute phase of the disease must be treated in a specially prepared environment known as the sanatorium type of care. Here the acute

(Continued on Page 1150)



# Group A Streptococcal Infections and Rheumatic Fever

By Sidney Rothbard, M.D.  
New York, New York

THE RELATIONSHIP of hemolytic streptococcal infections to the etiology of rheumatic fever has not as yet been universally accepted by physicians and the general public. Most students of this disease, however, believe that both the initial attack and subsequent recurrences of rheumatic fever are invariably preceded by hemolytic streptococcal infections of the upper respiratory tract, but no adequate explanation of the exact role played by the streptococci is available at present.

In an attempt to evaluate the connection between the primary infection and the rheumatic sequelae, a total of 153 rheumatic and non-rheumatic subjects who suffered 169 definite hemolytic streptococcal upper respiratory tract infections were studied over a period of years. Group A streptococci caused 162 of these infections; group C, six; and Group G, one. No cross infections occurred and in no case did the same serological type of group A streptococcus cause two separate infections in the same patient. Of these infections 102 were uncomplicated; twenty-nine were followed by purulent complications due to the same strain causing the original infection; and thirty-eight were followed by rheumatic fever, including four with purulent complications. Rheumatic recurrences developed seventeen times (31.4 per cent) as a result of fifty-four streptococcal infections in thirty-nine previously rheumatic subjects. On the other hand, primary attacks of rheumatic fever resulted from twenty-one (18.3 per cent) of the 115 streptococcal infections suffered by 114 previously non-rheumatic individuals.

Rheumatic manifestations followed only those upper respiratory infections due to group A hemolytic streptococci; among these no special serological type of streptococcus was found associated either with rheumatic fever or with purulent complications of the original infections. None of the seven infections due to streptococci of Group C and G led to rheumatic sequelae, although five

of these occurred in patients who were rheumatic susceptibles since they previously had rheumatic fever. Many of the rheumatic subjects suffered a number of non-streptococcal diseases such as rubella, rubeola, herpes zoster, bacillary dysentery, appendicitis, acute epidemic conjunctivitis, pneumococcal pneumonia, primary atypical pneumonia and upper respiratory tract infections of unknown etiology; but in no instance was rheumatic fever observed following these non-streptococcal infections.

One phase of the study was undertaken to ascertain whether serum antibody patterns of patients who developed rheumatic fever differed from antibody responses of patients who failed to develop any sequelae following their group A streptococcal infections. Antistreptolysin O, antifibrinolysin determinations, type specific bacteriostatic antibody, type specific anti-M, group specific anti-C, and nucleoprotein precipitin titres were done weekly on sera of these patients. Significant rises of antistreptolysin O occurred in 77 per cent, antifibrinolysin in 73 per cent, bacteriostatic antibodies in 76 per cent and anti-M precipitins in 64 per cent of all the infections. Three different streptococcal antibodies were demonstrable in the sera of 50 per cent of the patients, and one or more of the several antibodies investigated were found during convalescence in every patient studied. The rheumatic fever patients showed rises in antistreptolysin O, antifibrinolysin and type-specific antibodies more frequently than patients who developed purulent complications or those who made uneventful recoveries. Patients with purulent complications, however, showed the greatest increases in antistreptolysin O titre.

A slight delay in the beginning of the rise of type specific bacteriostatic antibodies and anti-M precipitins, as well as a similar delay in reaching the maximal level of antistreptolysin O, was observed in the group of rheumatic fever patients as compared with patients who developed purulent complications or those who made uneventful recoveries. Because marked variations among individual patients were found in each group studied it is questionable whether these findings are significant. The significance of the enhancement of general antibody formation in rheumatic fever patients, as compared with the patients who escaped rheumatic sequelae following their streptococcal infections, is difficult to evaluate, but the differences may be due to the continued inflam-

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From the Division of Pulmonary Diseases, Montefiore Hospital, New York, New York.

mation in the tissues of the patients with rheumatic fever. It is noteworthy that the rheumatic fever patients developed antibodies in a high degree to a variety of streptococcal antigenic components, which is added evidence that these group A streptococcal infections are closely related to rheumatic fever.

In view of the fact that only a few individuals develop rheumatic fever following group A streptococcal infections, it appears probable that the occurrence of this disease involves peculiarities of the host-parasite reaction to the infection not made apparent by the immunological techniques which we employed. It was thought that these abnormalities might be brought out by means of electrophoretic studies. A systematic investigation was therefore made of the pattern of the serum proteins of representative samples of the patients. Weekly samples of sera from the onset of the infection throughout convalescence and recovery were studied by electrophoresis in three patients who developed acute rheumatic fever, one who had a purulent complication, and two who had no sequelae following group A streptococcal infections. Marked changes from the normal serum protein pattern were found in both the rheumatic and non-rheumatic patients. An early depression of albumen with rises in  $\alpha_1$  and  $\alpha_2$  globulins and a delayed rise in the gamma globulin were noted. These abnormalities were more prolonged in the rheumatic patients. No significant alterations were observed to distinguish the rheumatic fever patients from those who did not develop the disease. The more marked abnormalities of the serum proteins of the rheumatic group of patients was probably due to the pathological disturbances found with the persistent inflammatory reaction. Nevertheless, these findings bring further evidence of the connection between rheumatic fever and the hemolytic streptococcal infection in view of the qualitative similarity of the over-all serum protein patterns of both the rheumatic and non-rheumatic fever patients.

Still another phase of these investigations was directed toward an electrocardiographic study of 110 young adult patients with scarlet fever, all of whom had large numbers of group A streptococci cultured from their throats. Nineteen of these patients developed pronounced electrocardiographic abnormalities similar to those seen in patients with active rheumatic fever. Eight of the nineteen patients in whom electrocardiographic ab-

normalities developed in the convalescent period had definite attacks of acute rheumatic fever. Four others developed mild and transitory rheumatic-like signs and symptoms. The remaining seven, who during a comparable period in their convalescence developed abnormal electrocardiographic changes, had no symptoms of rheumatic fever. The difference between these three groups of patients is in reality one of intensity. All apparently suffered from the same tissue injury that is characteristic of rheumatic fever.

These data provide additional supportive evidence for the thesis that rheumatic fever is related to hemolytic streptococcal infections, but they are also of further significance in that they provide an adequate explanation for the 30 per cent of patients with rheumatic heart disease in various clinics who fail to give a definite history of rheumatic fever. These patients probably had experienced carditis without polyarthritis associated with rheumatic fever, and the disease process went unrecognized following their upper respiratory tract infection. Moreover, it is of interest to note the studies of Levy, Stroud, and White who reported that about 68 per cent of rejected draftees with rheumatic valvular heart disease failed to recall having had rheumatic fever or chorea. It is quite possible that these rejected subjects had mild unrecognized rheumatic fever following hemolytic streptococcal infection similar to that in the patients described in this report.

The apparent relationship between rheumatic fever and group A streptococcal infections is best illustrated by the prevention of infection by sulfonamide or penicillin prophylaxis with the resultant failure of recurrences of rheumatic fever in rheumatic subjects. In control patients, however, who did not receive chemoprophylaxis rheumatic recurrences developed following streptococcal infections. A marked decrease in incidence of new cases of rheumatic fever was also observed among army and navy populations during streptococcal epidemics controlled by sulfonamide prophylaxis.

Although large therapeutic doses of sulfonamides and/or penicillin are of no value in rheumatic fever once the disease manifests itself, the possibility that adequate doses of penicillin early in the streptococcal phase may inhibit the chain of events which lead to rheumatic fever must be considered. This is emphasized since it has been

*(Continued on Page 1139)*



# The Physician and Community Action for Rheumatic Fever

By George M. Wheatley, M.D., M.P.H.

Third Vice President

Metropolitan Life Insurance Company

New York, New York

**R**HEUMATIC FEVER has been generally accepted as a major public health problem. In an increasing number of communities, both the medical profession and the public are ready to engage in organized activity to find cases and to provide adequate treatment; in fact, they are willing to make any logical move toward control over this important cause of heart disease. The rheumatic fever control program under the sponsorship of the Michigan State Medical Society places the state near the top of the list in the nation in its organized effort to combat fatalities and crippling in those with the disease. In this paper I wish to discuss why such organized activity is necessary and how it may be carried out. For intelligent community action, three things are basic: (1) professional leadership, (2) facts showing the magnitude and relative importance of rheumatic fever, and (3) a plan.

Perhaps at this point you wonder what this has to do with the practicing physician. As a clinician your primary concern is with the individual. When you are at the bedside, puzzled by a syndrome suggestive of rheumatic fever, it is of little help to know facts and figures on the severity, prevalence and incidence of new cases, or what agency representatives should be invited to a meeting to discuss case-finding, or to co-ordinate treatment services, or to develop a well-rounded community program.

Adequate care of the patient with this chronic disease is only partly a medical problem. The solution as a rule requires the services of many other professional individuals and agencies. *When* these services are to be brought to the patient, only the physician can decide. *How* they are to be made available, often requires facilities and funds from the community. The mobilization and strategic delivery of these services necessitate planning and organization. In this, too, the physician

and his medical society can and must play a leading part.

## Public Health Importance

Why is rheumatic fever a public health problem, and why is all this organized effort necessary? The American Council on Rheumatic Fever of the American Heart Association, a voluntary agency made up of delegates from many national organizations, including the American Hospital Association, the American Public Health Association, and the American Medical Association, recently pointed out that the following facts made rheumatic fever a public health problem.<sup>1</sup>

1. Infection with epidemic strains of group A hemolytic streptococci usually occurs a few days to several weeks prior to the onset of clinically evident rheumatic fever. The control of hemolytic streptococcal infections has long been generally accepted as a public health responsibility. Little progress can be made with regard to the rheumatic fever problem, unless this be accepted. In planning for the care of individuals with rheumatic fever and rheumatic heart disease, protection from epidemic hemolytic streptococcal infections is of primary importance and, with our present knowledge, represents the only way in which repetitive attacks, or recurrences, may be prevented.

2. Rheumatic fever requires several professional services and the utilization of varied types of facilities, if our full knowledge is to be applied in an effort to minimize the ill effects of the disease. Only by careful planning can services be made available for the various needs of the individual with rheumatic fever.

3. An attack of rheumatic fever usually lasts several months, often longer. Since the disease occurs most often in the low to moderate income groups, an economic problem of considerable proportion results. When progressive or recurrent, rheumatic fever presents a catastrophic economic burden to most families.

## Magnitude of the Problem

Another reason why the disease is of public health significance is the contribution of rheumatic fever and rheumatic heart disease to mortality and morbidity. A conservative estimate<sup>4</sup> places the number of persons in the United States less than fifty years of age who have rheumatic heart disease at about 600,000. This figure represents, of course, chronic cases as well as new ones.

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### Incidence of New Cases

There are very meager data on the number of new cases of rheumatic fever which develop each year in the general population. One of the few studies on a large scale has been reported recently by Collins<sup>3</sup> of the U. S. Public Health Service. He finds approximately thirty-five cases of rheumatic fever for every 100,000 individuals less than twenty-five years of age. In addition, there are seventeen cases of chorea and forty-six cases of heart disease for each 100,000 persons less than twenty-five years. The incidence of new cases of all three conditions was definitely greater in large cities than in small cities and towns. The highest rates were in the West, next in the North, and lowest in the South.

Using these rates, we estimate for the country as a whole the number of new cases of rheumatic fever and heart disease at ages five to twenty-four to be about 30,000 cases per year. Included in this number are probably more than 20,000 children and young persons who develop rheumatic fever. Among children and young adults in Michigan, on the basis of these calculations, between 2,000 to 3,000 new cases of rheumatic fever, including chorea and heart disease, could be expected annually. These are believed to be minimum estimates.

### Mortality in Young People

Mortality data are another index of the public health importance of the disease. Nearly all deaths from heart disease among persons who are five to twenty-four years of age are due to rheumatic heart disease. For this reason, the total cardiac mortality during this age period provides a minimal expression of the general mortality from rheumatic heart disease. We have recently studied the mortality among our white industrial policyholders, ages five to twenty-four, for the four-year period, 1942-1946, and find the order in the leading fatal diseases at these ages to be that shown in Figure 1.

Rheumatic fever and heart disease caused more than 13 per cent of all fatal disease in the period 1942-1946 in the five to twenty-four age group. The chart shows clearly that rheumatic fever ranks high as a cause of death throughout childhood. It is now second among diseases at ages five to nine. It will surprise many that malignancies cause more deaths than any other disease in this age group in our urban population today.

At ages ten to nineteen, rheumatic fever holds first place among the diseases, and second rank at twenty to twenty-four.

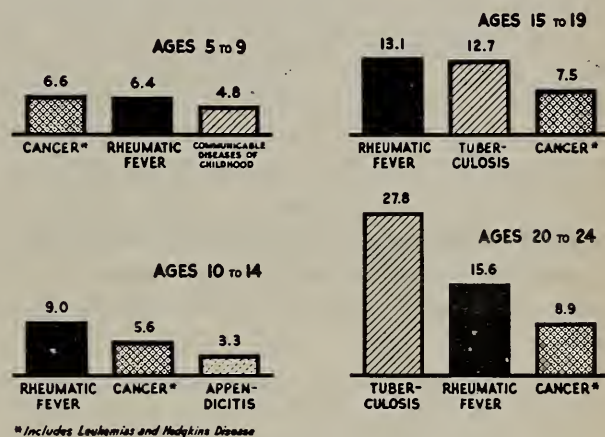


Fig. 1. Leading fatal diseases of young people. Death rates per 100,000 from 1942 to 1946.

### Disability

The magnitude of a disease, especially a chronic one, is measured less perhaps by immediate mortality than by its disabling effect. We know that rheumatic fever and rheumatic heart disease cause a tremendous amount of disability and require long and costly care. In the morbidity studies of Collins,<sup>3</sup> previously mentioned, rheumatic fever patients less than twenty-five years of age who were sick prior to the study year had an average disability of more than six months. The average duration in the hospital for all cases found in the survey was fifty-one days. More than 40 per cent of the rheumatic fever cases were disabled two months or longer during the study year. Many were evidently cared for at home or had a relatively short hospital stay because only 30 per cent of the cases went to a hospital at any time during the study year and less than 8 per cent of those confined to bed were in a hospital two months or more during that year. Fifty-nine per cent of those incapacitated by rheumatic fever were cared for by private physicians, who averaged nearly thirteen visits, most of them house calls, during the study year. More than a fifth of the rheumatic fever cases who had home calls had twenty or more such calls. In slightly more than 10 per cent of the cases, a visiting nurse was used, and practically none had a private duty nurse.

When one considers that this is only a partial picture of the care received or required by this group of new cases, that the likelihood of recurrence is greatest for the group as a whole in the



year following, and that many individual members of the group will continue to require treatment for years to come, one begins to visualize the enormous amount of treatment and the cost necessary for the adequate management of this or any other chronic disease. What would it cost to provide care for only the new cases of rheumatic fever we might expect for the country as a whole? Assuming the cost of hospital and medical care at \$10 a day—a very conservative figure today—to provide fifty days care for each of the 20,000 estimated new cases in the five- to twenty-four-year-old group would amount to ten million dollars a year.

Even from these crude measurements, the magnitude of this disease is clear. Rheumatic fever is a major public health problem.

### Community Organization

All of us who read General Eisenhower's lucid book "Crusade in Europe" cannot help but be impressed with the complexity of modern war. The degree of specialization directed toward the common objective of winning the last war has practically no comparison in peacetime living. Organizing these special skills and services of the allied arms and meshing them together to achieve a unified command and harmonious operation was an almost superhuman task. The specialization and wide variety of new skills and services which are associated with the practice of modern medicine present a situation comparable in some aspects to the complexity of waging modern warfare. We find this most evident in the management of chronic diseases, such as rheumatic fever and heart disease. In this war the purpose is to assure the application of those areas of medical and public health knowledge which will minimize disease, disability and death from rheumatic fever and heart disease and related illnesses. To find cases of rheumatic fever early, to bring diagnostic and treatment services to those who need them, and to keep patients under medical supervision require a high degree of inter-professional team play.

To achieve this necessary integration and correlation of function and service, we<sup>2</sup> suggested several years ago that the technique of community organization be used. What is community organization? It is a process used consciously or unconsciously in many fields of human activity—in politics, in art, in education, in economic life. Whenever individuals and groups seek ways to pool their

resources and efforts to achieve an improvement in group life, the community organization process is at work.

The conquest of tuberculosis, another chronic disease, illustrates what can be accomplished by community organization. Under medical leadership, in hundreds of communities group action has succeeded in developing these basic elements of a tuberculosis program: case-finding, adequate care, rehabilitation and vocational guidance, public and professional education. These objectives are not unlike the essentials of a rheumatic fever program.

### The Content of a Community Program

The American Council on Rheumatic Fever<sup>1</sup> has defined five general areas of community function applying to rheumatic fever and heart disease:

*Professional Services.*—Physicians, nurses, medical social workers, educators, occupational therapists, rehabilitators and others have specific skills and knowledge needed by the individual with rheumatic fever. The training and experience of these professional workers will largely determine the success of the program. The contribution of the physician is essential, but the other professional services are also necessary.

*Treatment Services.*—The rheumatic fever patient may need care in a general hospital, special hospital, sanatorium, foster home, convalescent home, or special arrangements for care in his own home. The standards and type of services available will determine what severity of illness can be cared for through a given facility. Regardless of how care is provided during the acute illness, or in the long period of restricted activity, a primary consideration should be protection from exposure to epidemic hemolytic streptococcal infection. Failure in this regard may result in repetitive rheumatic fever, frequently with resulting increase in heart disease or early death. Just what type of facility is developed for each community or area may well depend upon existent facilities and how they may be improved or altered to meet the community needs. It is clear that high standards are essential, and will vary with each type of service. It is urged that no facilities be developed or utilized unless they are qualified to supply a defined need of the rheumatic fever patient.

*Case-Finding Service.*—Finding of new cases or suspected cases is a prime requisite in a public health program. The most productive source for early case-finding for rheumatic fever and heart disease is through the schools. School health service should be prepared to play this important role in the rheumatic fever program. The school health and rheumatic fever committees of the American Academy of Pediatrics have recently issued a statement outlining how school health service can contribute to the rheumatic fever program of a community. Since there is no test for diagnosing rheumatic fever, an excellent diagnostic service is of the greatest value. Such a service not only forms the basis for indicating the needs of the individual, but can do much good in eliminating incorrect diagnoses with relief of the attendant and unnecessary anxiety. A diagnostic service is essential to other case-finding techniques.

*Follow-up Services.*—Here the community program can make perhaps its greatest contribution to the welfare of the rheumatic individual. In a chronic disease of this type with the threat of recurrence especially in childhood and the danger of cardiac failure later in maturity, provision for a continuous health supervision is extremely important. The school and industry are logical and strategic centers through which follow-up services can be directed. During the period when rheumatic fever is inactive, considerations of major importance to the final outcome can be decided. Some of these considerations include the application of preventive knowledge, improvement in environment, improvement in nutrition, welfare or other aid if necessary, vocational evaluation, guidance, rehabilitation and employment and directions as to physical activity. Multiple cases of rheumatic fever and rheumatic heart disease occur in a family, as often has been found to be true of tuberculosis. Hence, the family as a unit for the prevention of rheumatic fever can well be considered in the development of a program. Control of the spread of hemolytic streptococcal infections in a family with a known rheumatic fever patient would be a beginning in this direction.

*Public Information.*—No community program is complete or even possible without public education. Not only is an informed public essential for program support and financing, but education is necessary to enable the public to make the best use of the services offered.

In all planning for community functioning with respect to rheumatic fever, the patient should be the constant point of reference. What his needs are will determine the program which community organization must develop. Patients tell us by implication where in the community more planning is needed, and their own life stories give us the argument in favor of this planning.

### Procedures for Community Organization

For a long-range program, such as this must be, the initiative should come from within the community. Information and technical assistance may be supplied from outside to inform and interest community leaders, but to insure the acceptance and support of the program by the community, it must be initiated and carried out by members of the community. This program involves the cooperation of many groups and individuals. The physician is the ideal person to call attention to this disease and secure the help of key people in the community.

In localities where a council of health agencies exists or where there is any one major health agency, perhaps a tuberculosis association, such an organization may offer the machinery for initiating a community interest in the rheumatic fever program.

In our efforts to secure organized action, we must avoid creating a host of new community agencies, each with its own small staff and tendency to a narrow point of view. To avoid increasing the number of community organizations to a point where the public may be confused by the appeals, and the administrative cost may be out of proportion to the benefits provided, existing appropriate voluntary health agencies such as local tuberculosis associations, should be invited, wherever possible, to provide the organizational machinery for community rheumatic fever programs. There would, of course, be a separate professional committee to develop the program, recruitment of volunteers interested in the disease to assist with fund-raising, and the provision of some extra staff. But the general administration and the organization of the separate fund drives would be under the one local agency.

Certainly in directing lay and professional attention to this problem, no community agency has a greater opportunity or obligation than the local medical society. Where there is no community group in existence which might locally serve as the



framework for organization, the initiative may be taken by the interested physicians with the assistance of the health officer and lay community leaders. They could organize a planning committee such as is illustrated in Figure 2.

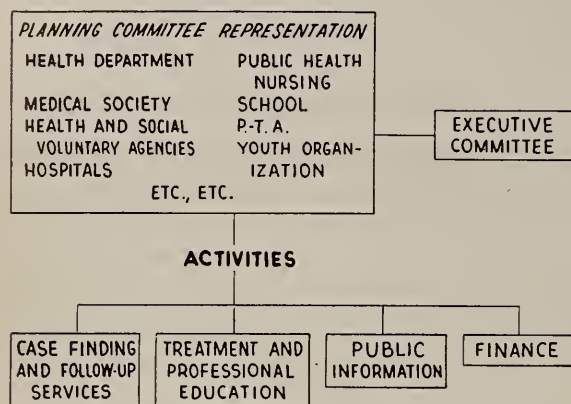


Fig. 2. Suggested committee organization chart.

The health department representative would be the health officer or his delegate; the representatives of the medical society would probably and desirably be pediatricians and heart specialists, as well as general practitioners. There should be representatives from organizations doing family case work, as well as from the department of public welfare. It would be desirable also to have nursing, education, civic, religious, business and labor interests represented on the committee. An executive committee would probably be necessary to act for the over-all planning committee in the interim periods between meetings, composed perhaps of the chairmen of the subcommittees. A general function of this committee would be to study the extent of the local problem and to report back to the agencies represented upon it. A complete committee program might be carried out through four subcommittees as shown on the chart: one on case-finding and follow-up; one on treatment and professional education; one on public information; and a finance committee, the functions of which would be to estimate financial needs and find ways to meet needs without developing a separate fund.

The suggested organization chart and related plans may seem too ambitious for a small community. It may not have enough of a rheumatic fever problem to justify an elaborate community organization. On the other hand, an active informed group, even in a small community, can

interest the proper agencies and individuals in neighboring communities. Such action may result in several communities co-operating to form a larger operating unit. The plan might be developed, therefore, on a county or health district basis.

Although the problems are many and complex, at least a start may be made with one phase of the program. Where to begin will depend upon local circumstances. If a cardiac clinic for children already exists, for example, it may be the starting point. The group interested in this activity can serve as a nucleus to arouse other community groups who can be brought together to serve on a planning committee. Another approach may be through the schools. A carefully conducted survey of school children to determine the incidence of rheumatic heart disease may be the means of arousing interest in a more extensive attack on the disease.

### The Physician Holds the Key to Control

If the magnitude of the rheumatic fever problem is to be disclosed and brought home to the various localities throughout the country, if there is to be intelligent action on the basis of what is known about the problem in the community, if there is to be economical use of community resources, and most important, if there is to be sustained public support of the efforts to control this disease, community organization, we believe, needs to be undertaken. In this program of community action, the physician and his medical society must assume leadership.

Yesterday, the physician treating sick people was a lone worker. Recovery of the individual patient often hinged entirely upon the physician's own therapeutic resourcefulness. Today, in the management of such complex diseases as syphilis, tuberculosis, and rheumatic fever, certain new and technical phases of diagnosis and therapy are apt to be peripheral to the routine experience and facilities of the general practitioner. Expert laboratory and consultative aid and co-operative group professional arrangements may be more frequently necessary. Today, also, the physician depends upon many other non-medical individuals and agencies to enable him to bring to his patient the complete galaxy of modern medical resources. And yet, as the focal point for these facilities and

*(Continued on Page 1153)*

# Surgical Management of Peptic Ulcer

By Charles S. Kennedy, M.D.

Detroit, Michigan

THOSE OF US who are old enough to have had the privilege of attending the clinics of the greatest of all American gastric surgeons, William Mayo, will recall that he frequently remarked that the main indications for gastroenterostomy, with usually resulting immediate cure of the patient, were three prior complete medical cures. The contention of the medical group of that day, including Sippy, Smithies, and others, was that surgery was rarely, if ever, necessary and that practically all peptic ulcers, whether on the stomach or duodenal side, were amenable to a proper medical regime.

Time altered Dr. Mayo's opinion, but unfortunately for the patient, both here and abroad, there still exist two such schools, steadfastly adhering to similar convictions: the one that nearly all ulcers are surgical problems, and the other that surgical interference in the management of ulcer is unwise, uncalled for, unnecessary, and worse. Surely, as is so often the case, both extreme viewpoints are wrong and the truth is found someplace in the middle ground.

Most thoughtful surgeons and internists are now agreed that the great majority of peptic ulcers, perhaps 80 to 85 per cent, are medical problems and rightly belong to the medical field, where proper and sustained care will result in a high percentage of cure or in relief of symptoms for long periods of time. There are, however, some complications which should shift ulcers from the tender ministrations of the medical man to the more sadistic attack of the surgeon, and those complications are five in number:

1. Perforation.
2. Obstruction.
3. Massive and repeated hemorrhage.
4. Intractable symptoms under good treatment.
5. Any possibility whatever of malignancy.

## Perforation

Until two or three years ago, it was generally conceded by all concerned that perforated peptic

ulcer was first, last, and all of the time a surgical condition. Recently, some doubting Thomases have appeared in the land, questioning the desirability of surgical interference and advocating the management of these abdominal catastrophes by the introduction of a Levin tube, half-hourly suction, chemotherapy and intravenous supportive fluids. Mr. Hermon Taylor stimulated this viewpoint by reporting, in the September, 1946, *Lancet*, twenty-eight consecutive cases treated in this manner, with four deaths, three of which he generously conceded had nothing to do with the perforation. Cohn and Mathewson, in *California Medicine*, November, 1948, review 265 perforations with an over-all mortality of 12 per cent and operative mortality of 6.4 per cent. In their opinion, non-operative treatment is justified if the peritonitis appears to be localizing, the patient is improving clinically and air cannot be demonstrated by x-ray. Who is wise enough to know which case falls in this group? The late Roscoe Graham, Canada's most distinguished abdominal surgeon, a year or so ago reported 125 cases of perforation operated on, with a mortality of 6 per cent, and five cases treated medically, all of whom succumbed.

Cohn and Mathewson close their article with the observation that "patients with perforated ulcer can survive without operation." It doubtless might well be added that many more can and will prematurely join their ancestors if this practice becomes generally accepted. It would seem from long experience that the only instances where prolonged medical treatment of perforated ulcer can be justified are those patients with advanced peritonitis and those whom competent surgical help cannot reach.

## Obstruction

Obstruction is of two types, inflammatory and fibrous. Of these two, inflammatory obstruction is much more common. It usually results from an occult or deeply penetrating ulcer, extending into the neighboring tissue, developing an edematous mass which sometimes may reach the size of one's fist and encroaches on the lumen of the bowel. Many of these cases will respond to medical treatment but some will not, and those cases after fair medical trial become surgical. The fibrotic obstructions occur in patients with ulcer histories of many years standing, most of whom are well beyond middle age. They have a low acid content high grade retention, and are really the only group

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in which gastroenterostomy may now be regarded as the operation of choice.

### Massive and Repeated Hemorrhage

The third group, including those with massive or repeated gastric hemorrhage, is somewhat controversial. Many still believe that these cases are all medical problems, and it must be admitted that the operative approach, particularly in those with massive hemorrhage, results not infrequently in disappointment for the surgeon and many times in tragedy for the patient. Crohn states that it has long been believed that hemorrhage encourages the healing of an ulcer by granulation tissue filling in the base and eliminating the crater. He also emphasizes the point that many times at operation for severe bleeding, the bleeding point cannot be located even by the most experienced surgeon. To emphasize this point, he describes 102 patients with massive hemorrhage in his own practice (one of whom had as many as fifty-eight separate severe episodes) all of whom were operated on, and in twenty-two of whom no explanation for the bleeding was found.

Each year at our hospital, there are several deaths from massive gastric hemorrhage. Dr. Bruce Douglas has furnished statistics to show that last year in Detroit there were ninety deaths from gastric hemorrhage, thirty-two of which were due to ulcer, the remainder resulting from cirrhosis of the liver, carcinoma of the stomach, and other varying causes. Not infrequently, the first evidence of carcinoma or ulcer of the upper gastrointestinal tract is a devastating hemorrhage, seriously threatening life or resulting fatally. Medical management of such catastrophies is usually successful, but there is a good number of such cases in which surgical interference is justified or demanded. Allen and Benedict first advised the surgical approach in 1933, and some surgeons feel that operation is now resorted to much too infrequently and is often far too long delayed.

In general, it may be said that the advisability of operation should be carefully weighed in all patients over forty-five years of age who have their first attack of severe upper gastrointestinal bleeding. The major reasons for this approach are two: first, carcinoma should always be suspected and, second, arteriosclerosis of the vessel which is the source of the hemorrhage may prevent coagulation and cessation of leakage ordinarily seen in younger patients.

Most patients under forty-five years of age may be handled medically with every expectation that the hemorrhage will be brought under control, but it is generally felt that if a patient has a second or third massive bleeding, operation is indicated in any case. We have seen a number of patients with repeated hemorrhage from duodenal ulcer under twenty years of age, one of whom went on to fatal termination at fifteen years of age, with no symptom of ulcer whatever until twelve hours before his death when he vomited a huge amount of bright red blood. A second boy in this group, now twenty-six years old, began at sixteen years of age to have severe hematemesis once or twice a year. Following resection a year ago, he has had no further trouble.

It is strongly believed, then, that patients in whom carcinoma may be suspected, patients over forty-five years of age with the first hemorrhage, and those with recurrent gastric bleeding at any age should be seriously considered as surgical subjects. Obviously, at any age, those patients who continue to bleed excessively under medical management belong to the surgical group.

All of these patients are given repeated transfusions for shock or anemia, but one may delay too long with transfusions. No better rule appears at hand than to institute surgical intervention in those cases in which, in spite of repeated large transfusions, shock recurs with accompanying hematemesis or large bloody stools. In my own experience, if a blood count taken three times a day cannot be maintained above three million cells with the aid of repeated transfusions, operative interference is demanded. It should be evident that such a patient is losing his transfusion as fast as it is being given. Such patients should be taken to the operating room, be given 2,000 or 3,000 c.c. of blood during operation and have large resections of the stomach done. Many times the bleeding vessel can be identified and controlled before the resection is started. The pancreaticoduodenal artery is the usual offender in chronic duodenal ulcer, and it can be readily reached and clamped by transection of the duodenum just below the pyloric ring. After the hemorrhage is stopped, resection can be carried out in a leisurely manner, and it is not unusual to find that with continued transfusion during operation, a patient with very rapid pulse and blood pressure below 90 leaves the operating table with a full pulse of 110 or thereabouts and a normal blood pressure.

Not uncommonly under careful scrutiny, no ulcer and no actual bleeding point can be identified. Hemorrhage in this type of case may be due to a tiny single erosion, multiple bleeding points from gastritis or an occult ulcer near the ampulla of Vater. We recently lost a patient on the operating table who bled to death from an erosion just proximal to the ampulla which we could not find at operation and which the pathologist located with great difficulty at autopsy. This patient's entire small bowel was filled with bright red blood which had seeped from the erosion just as fast as it had been introduced into the man's veins for the preceding twenty-four hours. It should be added that this patient had had several prior severe hemorrhages, in the last of which he had been seen by us and had refused operation. Dr. Owen Wangenstein flatly states that resection of 75 per cent of the stomach in these cases will cure such patients, and a steadily increasing number of surgeons and internists join in that belief. For some months past, Dr. Charles Johnston and his group at Wayne University have been carrying out some clinical studies in gastric hemorrhage by the actual application of topical thrombin through a tube to the bleeding site. The early reports indicate that not only does this method control most cases which are actively bleeding, but it has great possible value by accurately determining continuing bleeding, which has always been such a problem. The preliminary reports of the Johnston group are encouraging, and the results of future studies will be awaited with great interest.

#### Intractable Symptoms Under Good Treatment

It would appear to be unnecessary to debate the question of the desirability of operation for the patient who does not respond to good medical treatment or for the one who has repeated recurrent symptoms over a long period of time after several trials of a medical regime in capable hands. The percentage of patients who do not respond to dietary or psychotherapeutic measures varies in wide estimation from 10 to 30 per cent in this country. Krarup in the Meulengracht's Clinic in Copenhagen states that their proportion of medical failures approaches 40 per cent. Surely no one should argue that an intelligent patient who has given medical treatment a fair trial and still has partially incapacitating complaints should be denied surgical relief—but certain clinicians do. It is a bit difficult to follow the reasoning.

#### Any Possibility of Malignancy

The last group of cases includes those of possible malignancy. Dr. Henry Ransom, of Ann Arbor, reviewed twenty-five years of experience with gastric ulcer in a paper given before the American Surgical Society in March, 1947. In a very comprehensive review of 188 gastric ulcers which had been resected, his most striking observation was that 10 per cent were found to have carcinoma at the base, although malignancy was not suspected either from the history, the preoperative clinical findings or by the operating surgeon. In discussing the paper, Roscoe Graham stated that they had had a similar experience in Toronto, with the exception that in their own series of 150 resections, 17 per cent on section disclosed unsuspected carcinoma.

In the light of those figures, bulwarked by similar reports from all over the land, it does seem that medical men everywhere should reappraise the current practice so far as gastric ulcer is concerned. It has long been believed, as Dr. Lahey points out, that medical treatment may well be first tried on gastric ulcers less than 2.5 centimeters in diameter, and if symptoms abate, blood disappears from the stools, and the ulcer diminishes in size or disappears, treatment may be continued with occasional x-ray check-ups. The fallacy of this reasoning is self-evident. No surgeon with the gastric ulcer in his hand is able to determine many times, whether it is inflammatory or early malignant. General opinion to the contrary, some of the smallest gastric ulcers have malignant changes, with or without early metastases, and some of the largest ulcers remain inflammatory for exceedingly long periods. The surgery of carcinoma of the stomach presents a pretty dreary picture if one considers it from the long-range view. If it is true that early operation is the only treatment for malignancy of the stomach, and if it is true—and it is—that from 10 to 20 per cent of gastric ulcers are malignant at operation without malignancy being suspected, then it should follow, without much room for debate, that all gastric ulcers should be resected as soon as diagnosed. If this practice were generally followed, no time would be lost in the medical treatment of early malignant lesions, and a large group of potential carcinomas would be eliminated before malignancy developed. Surely no one can controvert this reasoning. It is strongly urged, therefore, that all gastric ulcers are surgical and should be operated on at the earliest opportunity.



Twenty-five or thirty years ago when the mortality from gastric operation was 30, 40, or 50 per cent, no one could justly urge the surgical approach. Surgery must offer a reasonable chance of survival, a minimum amount of side-chain effects following operation, and a reasonable chance of clinical cure. The mortality of resection has now been reduced to less than 3 per cent in the hands of experienced abdominal surgeons. In our own experience, there have been four deaths in the last 160 gastric resections.

Three surgical procedures are now largely used—two of which have stood the test of time, and the third of which is still in the study phase. Gastroenterostomy still has a place in the surgery of duodenal ulcer but has fallen from the most common operation to perhaps a one-in-ten procedure. Gastroenterostomy should be reserved almost exclusively for use in the patient beyond middle age with high grade fibrotic obstruction and a low acid value in the stomach analyses. If it is used in this group and well done technically, almost perfect results may be anticipated.

Gastric resection of the Polya or Hoffmeister type with removal of two-thirds to three-quarters of the stomach will result in clinical cures in 80 to 85 per cent of cases, improvement in another 5 or 10 per cent, and little change or complete failure in the remainder. Certain variations in technique may be required: the ulcer should always be removed on the stomach side and should be removed, if not unduly increasing the risk distal to the pylorus. The important point is that sufficient removal of the stomach, approaching 75 per cent, with the acid-bearing cells, results in cures, and that diminishing amounts of stomach excised result in correspondingly diminishing numbers of cures.

In the past four years Dr. Dragstedt has revived interest in vagotomy or partial vagus neurectomy. His reports of vagotomies, alone, done on several hundred patients are exceedingly encouraging when added to similar findings at other clinics. It is, however, interesting to note that the almost uniform success indicated by Dr. Dragstedt's and other reports are not confirmed by certain independent observers.

Dr. Walters of the Mayo Clinic staff has reported a number of unsuccessful vagotomy results, including marginal ulcers, persistent postoperative complaints from distention and other symptoms. Other investigators have reported painless per-

foration of marginal ulcers, increased gastric acidity with the lapse of time and many complications which make one hesitate to accept vagotomy as the answer to the profession's pleasant dream of a cure-all for every gastric complaint.

Dr. John Hartzell of Detroit pioneered vagotomy in 1929 with an experimental study on eight dogs and reported anacidity in all of them. Van Zandt restudied four of the animals two years later and found that the acid stomach content had returned to normal values in all four. We have done eleven vagotomies, all combined, with the exception of one, with resection or gastroenterostomy. The results have been good but, so far as we can determine, no better than resection alone. Some surgeons believe that the chief advantage of vagotomy will be found in the patients with hemorrhage, especially those who bleed from marginal ulcers following resection. The whole subject needs much further study, and the answers will not be available in less than five or ten years. Gavisser puts it well when he says, "This operation is being given a fair clinical trial by several competent investigators. In the meantime, it is important that one maintain an open mind and neither hastily condemn nor hastily praise the procedure."

### Summary

1. Great progress has been made during the past quarter century in the surgical treatment of ulcer.
2. Internists and surgeons should be able to agree on certain principles which shift ulcers from the medical group to those in which operation is indicated, if not imperative.
3. It is urged that all gastric ulcers and many uncontrollable bleeding duodenal ulcers should have early surgical intervention.

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MSMS

At Philadelphia Naval Hospital during seven years, 1941-1947, 2,001 autopsies of males eighteen to eighty years of age, revealed 486 malignant tumors or 23.4 per cent of all autopsies.

# Public Health and the Private Physician

By Albert E. Heustis, M.D., M.P.H.

Commissioner, Michigan Department of Health

IN THIS PAPER I would like to give my answer to the question, "How can the health department help the private physician and how can the private physician help the public's health?"

Probably, first of all, it would be well to define the fields of interest of public health in Michigan. As I see it, there are three different areas of concern to health departments: The first is prevention. The second is the finding of disease and physical defects. The third is the development of the greatest possible degree of health.

Let us consider the answers to the first half of our question by taking up these three spheres of interest individually and seeing just how health departments help private doctors in each one.

The first area of interest is prevention—prevention of disease itself, prevention of the seriousness of disease when it does occur, prevention of the spread of disease to others, and prevention of unnecessary death.

In this prevention work, health departments help physicians by having biological products available and by education. The education is designed to condition people so that in response to certain conditions they will react in a certain way. Just what is the reaction sought? To get people to go to the office of the family doctor.

In regard to the second field of interest, the finding of disease and physical defects, what things are health departments interested in here? The answer is all communicable diseases, including tuberculosis, syphilis and gonorrhea, hearing defects, vision losses, crippled children, heart disease, diabetes, cancer, and nutritional defects and pregnancy. What do we do with all these things once they have been found or suspected? We try to get the people into the office of the private physician for further investigation and for any indicated treatment.

I would like to give one specific example where health departments may be helpful with patients with diagnosed or suspected cancer. Follow-up by

health departments can be used to cut down on the very costly interval which sometimes elapses between the time that the private doctor advises his patient to do something and the time when the patient gets around to following the doctor's advice. Health departments can be used in getting that patient to follow the doctor's advice. Health departments can get that patient back to the doctor promptly and help to keep him there until he has received the maximum benefit possible.

Now we come to how health departments can help in the third field of interest, that is, in the development of the greatest possible degree of health. This can start in two places, with the person already in apparent health or with the person in sickness.

If we start with the apparent health category, health departments are interested in the various types of periodical examinations and routine surveys. Who is going to do all of these examinations? Who is going to take care of most of the venereal disease found, the cancer, the diabetes and the heart diseases? The answer is the private physician.

If we start with a person in sickness, health departments are interested in good medical care by private doctors. Health departments can help achieve this by working on programs for medical society meetings, encourage attendance at postgraduate courses, and they can encourage general practitioners not to specialize but to improve their skills by developing a field of special interest within the framework of general practice.

Health departments can help secure good medical care by promoting good hospital records. Health departments are interested in the availability of good laboratory service, and in the availability of adequate hospital facilities and equipment. They are interested, too, in the follow-up and the rehabilitation of those who have been sick.

If we take all three of these interests of health departments together—prevention, finding of disease, and development of optimum health—what are they worth to the family doctor: first, in dollars; second, in good friendly relations and personal satisfaction that comes from doing real service for individuals; and third, in doing his part for community health?

How much is it worth? This depends on what the doctor does when the patient comes in to see

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him. People are usually willing to pay for services if they are sold on the value of such services, that is, if they think they are getting their money's worth.

Let us now turn to the consideration of the second half of our question, "How can the private doctor help the community's health?"

First, each physician can individually carry out the good medical theories which he was taught. He can give good prenatal and postnatal care, continuous supervision of babies and examinations of entering school children, and give periodic examinations of adults. He can use the laboratory to confirm his diagnosis and control treatment. In the last case I am thinking of possible delays in the diagnosis of diphtheria, because the newer drugs are used to treat the symptoms without first taking a throat culture.

A second way that the private doctor can help the community's health is by keeping immunizations up to date.

A child's immunization program should be started by the age of six months, and his initial protection should be completed by the age of one year. It is also necessary that immunizations be kept in force with appropriate boosters. As I see it, there is a real need for the doctor, or whoever in his office does the immunizations, to do an individual educational job as well as to insert the needle.

There is need for a community plan for immunization, and this should be a written plan. In this plan, too, some provision must be made for the protection of those who are either unable or unwilling to pay for it, as immunization is done to protect the community as well as the individual.

Thirdly, private physicians must realize that so-called "mass procedures" or "clinics" really help private practice. They uncover work for private physicians that otherwise might have been missed, and they create a demand for the same type of service in the private doctor's office.

I have a specific example of this. When Dr. Pearl Kendrick first had her whooping cough vaccine ready for use, through agreement with the Kent County Medical Society and the health department, it was offered both in the clinics and in private physicians' offices. The first year approximately 90 per cent of the immunizations were done in the clinic, and 10 per cent were immunized by private physicians. Last year those figures were

reversed; 90 per cent were immunized in the doctors' offices and 10 per cent in the clinic.

A fourth way that the private doctor can help the community's health is to do his part to maintain liaison with the county health officer. This works both ways. The health officer should keep other doctors informed as to what diseases are prevalent, what diseases are expected, and whenever anything unusual occurs. The health officer should also provide doctors with accurate statistics.

If the health officer is to do these things, the private physician can help by reporting major contagion and suspected major contagion. It is poor public relations and poor community health not to isolate and report suspected communicable diseases. It is also poor public relations not to know the rules and regulations for communicable diseases.

The private physician can help, too, by properly filling in birth and death certificates. In venereal disease control he can help, in addition to reporting cases, by either assuming the responsibility for contact investigation or specifically delegating that responsibility.

Another way that private physicians can help the community's health is by understanding that county health department services are paid for in taxes by everyone and that its services are available to all in the community. It is just not good public relations to deprive your patients of services for which they have already paid, and here I am thinking of nurses not being allowed to visit the patients of certain private physicians.

Much is to be gained by the private physician understanding the work of the public health nurse and what she is trying to do. It should be completely understood by everyone that the public health nurse should work within the framework of standing orders agreed upon by the individual doctors.

Before I close I would like to say just a word about the services of the public health nurse and just a few things about the health officer as a person and as a doctor.

First, I would like to give specific instances of how the public health nurse can be of service to the private doctor. She refers patients to him for medical care and curative treatments, for periodic care and protective treatments, and for follow-up examinations.

The public health nurse can assist the private physician by providing nursing care in the home. We believe that it represents a wise use of health department funds if, wherever possible, the nurse attempts to teach someone in the home how to carry out the various procedures.

Specifically, she can teach how to prepare and give a hypodermic injection such as insulin. She can teach the young mother how to bathe her baby. The public health nurse can help with the home care of premature infants: first, by seeing that home conditions are suitable before the baby's discharge from the hospital; second, by giving nursing care if needed; and third, by teaching the mother how to care for the baby, so as to prevent exposure to infection.

The public health nurse can show the mother how to give her child an inhalation.

She can teach the patient's family how to take care of dressings such as those used with cancer and colostomy patients.

The public health nurse can assist with the care of rheumatic fever patients in the home by teaching bedside care, by interpreting what is meant by rest and by helping the mothers to plan graduated activities under the private doctor's orders.

The public health nurse can also help private physicians by providing health teaching for his patients. She can teach the need for routine examinations, can translate diet suggestions into menus, and she can interpret to the private physician home situations which may influence the physical and mental health of his patient.

I would like, too, to say a few words about the health officer as a physician.

First of all, public health is a medical profession. The Michigan health officer is a medically trained doctor trying to become as proficient in his field of public health as other doctors are in their fields. The public health officer has no intention of actually practicing medicine; he is interested in the private practice of medicine only insofar as his efforts can improve or advance the medical care of the public in general.

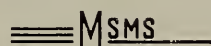
It is illogical to believe that one member of the medical society is different from another just because he is in public health. Both of us are interested in medicine: one primarily in individual health and the other primarily in community health.

The health officer should be invited to participate in medical society and hospital staff meetings just as any other medical doctor. He should also participate in the planning and carrying out of all programs in the public interest. And like any other medical doctor, he should be given things to do for his society through its committees.

Remember that the full-time medical county and city health officer, because it is a part of his job to meet and know community groups, can do a great deal to explain and interpret the problems of health care in general and the problems of the private doctors in particular.

The point of the whole discussion is just this: private physicians and health officers are together the litter bearers of community health. If the private physician does not carry his share of the load, the whole business spills over, and without the help of the private doctors not even the best health officer can make the thing work.

If community health is to be served, not only are both needed, but both must work actively together to get the job done. And if the job is done well, there will be plenty of credit for all concerned.



## GROUP A STREPTOCOCCAL INFECTIONS AND RHEUMATIC FEVER

*(Continued from Page 1127)*

shown by us and others that the antibody response of the host is checked by early removal of the antigenic stimulus.

The fact that respiratory infections caused by other microorganisms or viruses do not act as precursors to rheumatic fever strongly suggests that we direct our attention to group A streptococci in attempting to understand this disease, rheumatic fever.

Our lack of understanding of the basic mechanisms by which group A streptococci initiate rheumatic fever should not permit us to overlook the established facts put forward in this report and thereby prevent us from applying the information we now possess in dealing with such potentially malignant diseases as scarlet fever, streptococcal tonsillitis and pharyngitis, from which rheumatic fever develops.



# New Trends in the Treatment of Allergic Diseases

By George L. Waldbott, M.D.

Detroit, Michigan

THERE IS increasing evidence that an allergic reaction represents a defense mechanism for the purpose of warding off and rendering innocuous antigens to which sensitivity exists. It can be likened to an inflammatory process which localizes and neutralizes harmful bacteria. In hay fever and allergic sinus disease this process takes place in the nose; in allergic skin lesions, in the skin; in asthma, mainly in the bronchi. The secretion of mucus tends to dilute and eliminate the antigen; the cough reflex assists in its elimination, the attraction of eosinophiles and other leukocytes is to help in rendering the antigen innocuous; emphysema present in asthma tends to close up the interalveolar stomata and thus prevent further absorption of antigens into the blood stream. In incipient asthma in infants this defense mechanism is lacking.<sup>2</sup> Instead of developing these features, manifestations of anaphylactic shock and death, formerly called "thymic death," ensue. Here we observe petechial hemorrhages and allergic edema in the lungs, followed by secondary pneumonitis, lymphocytosis and hyperplasia of lymphoid glands.

The defense reaction of an asthmatic attack is associated with certain morbid changes which are induced by histamine. Treatment must be directed towards control of symptoms from these changes and simultaneously toward interfering as little as possible with the various protective functions of the system.

In asthma, four different situations present themselves, each of which calls for different therapeutic action: (1) the emergency, (2) the chronic asthmatic state, (3) the state of rehabilitation, (4) the complications.

## The Emergency

The emergency is characterized by bronchospasm combined with edema on skin and mucous membranes.<sup>7</sup> In adults, one of the most common sources of allergic shock is ingestion of aspirin; other sources are ingestion of such food as fish, nuts and cottonseed; inhalation of animal hair,

dusts of organic and non-organic chemicals; and therapeutic injections of biologicals, if the patient exhibits excessive sensitivity to the product. Allergic shock is also encountered during skin testing and in treatment with antigenic extracts. Here the most serious aspect is the accidental puncture of veins and intravenous injection of a potent antigen.

Effective relief and, indeed, the patient's life depend on the promptness with which large doses of adrenaline are given combined with intravenous aminophylline and antihistaminics.

[In order to prevent emergencies from intradermal testing, the following rules were set down elsewhere:<sup>4</sup> (1) In young children and infants who are most susceptible to severe reactions, no intradermal skin tests should be performed. (2) No tests should be given for antigens for which a history of a severe reaction from inhalation or ingestion has been obtained. (3) In proceeding with intradermal testing, an attempt should be made to gauge the patient's skin reactivity by testing for those antigens first from which generalized reactions are uncommon, such as certain fungi and certain foods. If these initial tests indicate marked sensitivity, testing material for more potent extracts should be adequately diluted. (4) Superficial veins should be avoided in testing.]

## The Chronic Asthmatic State

In treating the chronic asthmatic state, the following considerations should be borne in mind: (1) Chronic perennial asthma or allergic nasal disease is usually initiated at, or shortly after, the termination of the pollen seasons.<sup>1</sup> The attacks are likely to become aggravated at subsequent pollen and fungus peaks. (It is the constant, uninterrupted absorption of an antigen such as pollen, house dust or fungi, rather than the occasional one, that accounts for chronicity in asthma.) (2) Food is a minor factor in chronic allergic diseases other than gastro-intestinal allergy. In only five out of fifty-six cases did complete disregard of food sensitivity aggravate chronic asthma.<sup>8</sup> (3) Cessation of symptoms following administration of a certain measure does not indicate that this measure is responsible for the so-called "cure." With the disappearance of certain pollen or fungi from the air and with the spontaneous termination of intercurrent respiratory infections, the allergic balance tends to become re-established. (4) Prolonged use of any drug is liable to aggravate asthma; its discontinuance may lead to the patient's improvement. (5) By our efforts to reduce the patient's untoward symptoms, we may interfere with the natural tendency to recovery.

<sup>7</sup>Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 23, 1949.

### Improvement of Immunological Balance

Improvement of immunological balance is possible through (1) preventing contact with damaging antigens, (2) hyposensitization, i.e., building up protective antibodies, (3) control of infection.

1. *Prevention of Contact.*—No details are required on avoiding harmful antigens, as this is thoroughly covered in most textbooks. Less emphasis is placed on discontinuance of otherwise harmless medications which are taken habitually. The worst offender in this respect is habitual use of epinephrine by spray or by hypodermic injection. Once a patient is given a hypodermic syringe or an atomizer, it is difficult to break him of the habit of reaching for it at the slightest apparent need. (If one recalls the appearance of those habitually using epinephrine, their striking pallor, tremor and constant tachycardia, one cannot help but feel that the withdrawal of this drug constitutes a major therapeutic step.)

No opiates of any kind should be employed in asthma. They diminish the cough reflex and thus further the tendency toward asphyxiation. Another drug often habitually used by asthmatics is aspirin. It frequently relieves asthmatic attacks and is therefore favored by patients as well as by the makers of patent remedies. When asthmatic seizures are extremely severe, the possibility that the patient had taken this drug should always be borne in mind.

2. *Short Interval Hyposensitization.*—The most striking, and yet most neglected, means of relief for chronic asthma is rapid hyposensitization<sup>6</sup> with the seasonal pollen or with other inhalants to which the patient gives strongly positive skin reactions. It is based on the common observation that a patient with hay fever will obtain instant relief during the hay-fever season following several injections of pollen extract, provided the dose is large enough to produce a local wheal of moderate size and not too large to cause an aggravation. In selecting the pollen and fungi, I am guided in summer by the results of air surveys of pollen and fungi. In winter, house dust, fungi and greatly diluted bacterial antigens are employed in conjunction with antibiotic therapy.

3. *Control of Infection.*—This is now considered a major step in the treatment of chronic asthma regardless of whether the disease originated from an intercurrent upper respiratory infection or

whether infection is superimposed upon primary allergic sensitivity. Sulfa drugs and, preferably, penicillin and streptomycin, should be chosen according to the clinical manifestations. Intradermal skin tests for penicillin must be given before each new course of treatment as serious accidents may occur from sensitivity to penicillin acquired from previous injections. Indications for antibiotic treatment are leukocytosis, purulent sputum, increased sedimentation rate, the presence of low grade temperature. (Sinus operations must occasionally supplement this therapy if extensive polypoid degeneration of the mucosa and other secondary structural changes are present which do not improve with antibiotic therapy.)

### Elimination of Antigen from Lungs

Expectorant drugs, particularly iodides, ammonium chloride and ipecac, aid in this process. Relief of bronchospasm is another means to release mucus for expectoration. The two drugs of choice are aminophylline and epinephrine. Rarely is there any need to employ doses larger than 1/10 to 2/10 c.c. of epinephrine. They are as effective as larger ones and much less harmful. Small doses of the aqueous solution are far preferable to epinephrine in oil or gelatin. The slow rate of absorption renders its therapeutic action uncertain, interferes with antigenic treatment and prolongs the unpleasant side effects of epinephrine. In employing aminophylline intravenously, doses of 3.0 to 5.0 c.c. of the 10.0 c.c. ampoule (3¾ gr.), injected slowly, are sufficient to control attacks of average severity. Aminophylline is the most effective and least unpleasant drug in asthma treatment. It can be given in doses of 7½ grains as an enema, in suppositories, intramuscularly, or orally (enteric coated!) in 1½ or three grain doses. Other bronchodilators, such as ephedrine and the new products Isuprel and Amphaphrene, are useful but much less desirable additions because of their unpleasant side effects. The latter two drugs are best administered by aerosol inhalation (1:200). Time-honored asthma powders, containing stramonium and iodide, or asthma cigarettes are of definite value in certain cases. Occasionally an injection of caffein sodium benzoate (0.5 gm.) secures considerable relief of bronchospasm.

Death in asthma is usually due to obstruction of bronchi by thick, glue-like mucus. It acts as a check valve similar to a foreign body in the bronchi. Its removal by bronchoscopic lavage,



therefore, should be considered as obligatory a procedure as the removal of a foreign body from the bronchi or a tracheotomy in diphtheria. Even if the patient presents a poor surgical risk, this operation should be performed. In eight cases<sup>5</sup> this measure has been life-saving. In 152 additional therapeutic bronchoscopies, cessation of attacks was secured in fifty. The success of this treatment depends entirely on whether or not the characteristic mucus is present. It is of little avail if the clinical picture is dominated by bronchospasm, namely, in asthma of psychosomatic origin and in incipient allergic asthma, where urticaria-like edema and little mucus is found. Precautions should be observed<sup>5</sup> for the prevention of accidents which arise principally from sensitization to, or intolerance of, local and general anesthetics and other medications employed during bronchoscopy.

### Symptomatic Treatment

We are now able to counteract the harmful effect of the antigen-antibody reaction by drugs which neutralize the effect of histamine. These drugs relieve bronchospasm, aid in drying up bronchial and nasal secretion. They relieve the nightly cough which is so annoying to patients and control minor attacks. In combination with other drugs, especially aminophylline (Hydriyllin—Searle), they are probably more effective than either drug alone. Given intravenously (20 to 50 mg.) they relieve attacks of moderate severity. The routine and persistent administration of these drugs is as harmful as that of other drugs.

Other symptomatic therapy is concerned with securing rest, relieving cough, establishing proper nutrition, counteracting dehydration and controlling anoxia. Barbiturates, or enemas of ether in olive oil, in equal parts, may be indicated for sedation. Mixtures of oxygen and carbon dioxide or of helium and oxygen, hailed by some as a panacea for asthma, are not always effective. This may increase the patient's discomfort and anxiety, particularly when, as is often the case, no noticeable anoxemia is present.

For sudden loss of weight from dehydration large doses of fluids, glucose and amino acids are indicated. In the giving of more than 500 transfusions of blood plasma or whole blood to asthmatics, startling effects have been observed on several occasions. There are indications that through blood of certain individuals, protecting ("blocking") antibodies can be transmitted. In selecting

blood for transfusion, caution should be exercised since harmful reagins may also be transferred. We employ a preliminary skin test (1/10 c.c. intradermally) with several prospective blood specimens and choose the one which produces the smallest wheal or flare. (Allaying the patient's fears and worries, as well as improving his surroundings, plays a significant part in supportive therapy.)

### The State of Rehabilitation

After subsidence of asthmatic attacks, an important phase of treatment begins which necessitates a reversal of many measures carried out during attacks.

*Nutrition.*—Our first concern is the improvement of the patient's nutritional state. Immediately following an asthmatic attack, foods which had been harmful before can usually be eaten with impunity. An attempt should be made to disregard former food sensitivity and to employ high caloric diets. Only those foods are eliminated which are definitely recognized as harmful. Only rarely is it necessary to eliminate food for a long time. It is much more difficult to combat the patient's fears of eating a certain food than to overcome his sensitivity to food.

*Inhalants.*—An effort should be made to adjust the patient to normal surroundings in order that he will learn to overcome sudden exposure to inhalant antigens. There is ample evidence that an antigen absorbed repeatedly at short intervals is much less damaging than if it is avoided strictly for a longer time and then happens to be accidentally inhaled, ingested or injected. Furthermore, by trying to impose too many restrictions on the patient, we succeed in isolating him psychologically from his surroundings and provoke most serious inferiority complexes. While general cleanliness in a house should be stressed, precautions for disposal of upholstered furniture, rugs and curtains which may have been harmful before should not be carried to an extreme if it has been ascertained that these antigens do not induce attacks.

*Effort.*—An important phase in rehabilitating the patient is the improvement of his threshold of tolerance to effort. As soon as possible he is to initiate light exercise several times a day, such as walking, climbing stairs, bending, squatting, at first with moderation and indeed with caution. This program is intensified if he remains free from

attacks. Even such activities as playing golf, bicycle riding, climbing, hiking and swimming—things which are otherwise harmful to the patient—should be encouraged at this stage. If not tolerated, they should be discontinued for a few days or weeks. Here, too, the boost of the patient's morale, by insisting on having him perform normal activities which had heretofore been forbidden, universally outweighs any temporary ill effect.

*Cold Sensitivity.*—Allergic patients may develop severe attacks when exposed suddenly to cold or heat. Duke suggested gradually building up a tolerance to temperature changes by sponging arms and legs with cold water and later by rubbing ice on the body surface. Some patients thus acquire the habit of taking a cold bath daily and are thus conditioned to brave the winter months.

*Climate.*—To recommend a change of climate to a patient is frequently a convenient means by which a doctor rids himself of a patient with whom his treatment has failed. Great caution should be employed in making this recommendation. The patient often considers the act of breaking up his home and moving to a different climate his last resort. If this experiment fails, despondency and despair ensues. A thorough investigation of the fungus and pollen situation of the prospective territory should precede any such recommendation and should be carefully checked with the patient's sensitivity. Moving the patient to the house next door may have the same effect as sending him far away. It is particularly harmful to have patients return from a pollen-free area at the height of the pollen season. This often elicits the first attack of asthma.

*Psychosomatic Element.*—It is not difficult to appreciate why the psychosomatic element plays such an important part in asthma. Some of the chief reasons are the patient's fear of attacks, his concern about becoming asphyxiated, his habitual use of harmful medications, his insecurity in his earning ability, his inadequacy in his role as husband and father. Through the many "don'ts" which have been imposed upon him throughout his life by doctors, relatives and friends, he has become psychologically isolated from his surroundings. Worried relatives, especially mothers, in the case of children, contribute further to his insecurity. In no other disease is the physician apt to contribute toward aggravating this situation as much

as in asthma. Conversely, a physician may completely alleviate asthma of long standing through encouragement, proper counsel concerning the various aspects of the disease, and through teaching the patient and his family an intelligent approach to the above problems. It is rarely necessary to refer him to a psychiatrist for lengthy—and costly—treatments.

### The Complications

Complications of asthma arising from obstruction of bronchi by mucus are atelectasis of a portion of the lungs or of whole lobes, bronchostenosis and pneumonitis. Accumulation of mucus in the terminal bronchi and its subsequent infection may lead to bronchiectasis. Permanent bronchiectasis as a complication of allergic asthma is much less common than it appears from the literature. (On the other hand, a certain degree of temporary bronchiectasis probably exists in most chronic asthma and subsides upon the termination of the attack. Bronchograms indicative of such lesions when taken during an asthmatic attack were negative when repeated after its subsidence.)

Persistent and severe cough may induce such rare conditions as subcutaneous emphysema, mediastinal emphysema, spontaneous pneumothorax, cystic degeneration of the lungs and spontaneous rib fractures.

Anoxemia may account for convulsions during attacks, especially in children. The equivalent of this condition in adults may be the sudden syncope occurring during severe coughing spells. The patient falls on the floor, remains unconscious from one-half to one minute, his face being markedly cyanotic. Spontaneous recovery occurs promptly with the disappearance of cyanosis.

Only a few points can be raised concerning the treatment of other allergic diseases. It is now generally recognized that in urticaria allergic management is effective only in the true allergic type. In a survey of 158 cases of chronic urticaria, drugs and inhalants were found to be very significant causes. The differentiation between the allergic and nonallergic type of urticaria can be based on such clinical features as leukocytosis, absence of conclusive skin reactions, lack of eosinophilia, lack of allergic family and personal history.

Allergic eczema, in my opinion, constitutes a combination of three factors, namely, the allergic

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# Anesthesia---The Weakest Link in the Surgical Procedure

By Ivan B. Taylor, M.D.  
Detroit, Michigan

THE IMPORTANCE of anesthesia in the surgical treatment of patients has been a subject of foremost interest to me during the last fourteen years. During this time much progress has been made in the field of anesthesiology. Ever-increasing numbers of our profession have become cognizant of the value of good anesthesia. Still larger numbers have lent an ear at least to the things we have to offer, even though they are unwilling to give more than lip service in aiding in this progress.

Personal experience has convinced me that anesthesia is of utmost importance in many types of surgical procedures. However, even more important than this is to have safe anesthesia, even though it is perhaps not the most pleasant for the patient and the surgeon, particularly for elective operations. It seems to be particularly unfortunate when an anesthetic death occurs in a patient who is in fairly good condition undergoing an elective operation. The loss of such patients should be reduced to an absolute minimum. I have knowledge and data of deaths in many such patients, and in a recent report by Ruth et al<sup>1</sup> of the Anesthesia Study Commission for the City of Philadelphia, one-half of the anesthesia deaths in 300 patients were decided to have been preventable. They state, "A higher incidence of preventable deaths occurred in patients in good preoperative physical condition and in age groups usually considered optimum risks for anesthesia." Therefore, one cannot say that there are only a small percentage of the patients that require skilled anesthesia administered by an anesthesiologist. It is true that in a certain percentage of the cases the immediate importance is much greater; however, the loss of these patients in good condition to have relatively safe operations performed seems very sad affair. It is true that as we attempt to anesthetize patients in poor physical condition, when an operation is their only hope of recovery, we will encounter difficulties just as will the surgeon who attempts to save patients by extensive

operations; but this is a responsibility that we must accept. In some communities there are surgeons trained and qualified to do surgical procedures that are not frequently done because of inadequate anesthesia.

Anesthesia requires the use of the most potent depressant drugs used in the practice of medicine and the administration of these drugs to the most extreme degree. During the administration of general anesthesia one has seconds or minutes to make a diagnosis and determine the changes or treatment indicated. This is quite a marked contrast to the time available in ascertaining the effects and further need of most drugs used in the practice of medicine.

Anesthesiologists are the first ones to admit that operations within the thoracic cage were retarded for many years because of lack of proper anesthesia. Advances that have been made in this type of anesthesia, along with many others, have been made by medical anesthetists, even though many of the procedures may be carried out by others at the present time. There is an ever-increasing tendency to do more extensive operations for conditions previously considered hopelessly inoperable. If anesthesia is well enough developed in the future, surgery will make progress in many communities. If we do not continue this progress and increase the number of anesthesiologists available, anesthesia will continue to retard the development of surgery.

One reads of the discovery of various new drugs in anesthesia, but these are of little importance compared to some of the other types of progress. The most important progress made in anesthesiology during the last two decades is the improvement in teaching methods and the means of disseminating knowledge among the medical profession, particularly those who are administering anesthesia. These improved methods of teaching that follow along the lines of other specialties in medicine have encouraged many young medical graduates to enter the specialty of anesthesiology. They have seldom been encouraged to enter this specialty because of financial advantages. Today, it is an important fact that the advances in anesthesia are the improvements in the administration of drugs and not in the type of drug itself. It is a well-accepted axiom in this specialty that the skill and care with which the drug is administered is more important than the choice of the drug. The literature abounds with indications and contra-

<sup>1</sup>Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 24, 1949.

indications, with theoretical instructions for choosing drugs and techniques for various types of surgical procedures. However, this does not make for good anesthesia unless these methods are properly carried out during the administration.

In spite of the improved teaching methods and the relatively large number of teaching centers, there is a lack of interest on the part of the medical graduates to enter this specialty. One of the reasons for this lack of interest in anesthesiology no doubt arises from the lack of respect towards this specialty. There is need to interest not those who have failed in other fields but the best that the medical profession has to offer, and such individuals will be interested more often when respect for the specialty has developed. One factor of prime importance is that anesthesiologists must have professional standing in their community that is parallel with other specialties.

Who has administered anesthesia during the past 100 years? This period is best divided into three parts for general discussion. These are from 1846 to 1900, from 1900 to 1925 and from 1925 to the present. During the first period nearly all anesthesia was produced by the inhalation method, using ether, chloroform or nitrous oxide. The most active group during the first few years of this time were dentists, and they made contributions to anesthesia. With more widespread use of anesthesia, young physicians were required to administer it all too often without supervision or instruction. It was part of their duties before they could ascend to the important task of assisting the surgeon. Very few of them ever became interested or proficient at this task. There are accounts in the literature of how poorly anesthesia was administered. As time passed, more emphasis was put on the importance of anesthesia. By the turn of the century a few physicians were administering and teaching anesthesia. One hears tales that the administration of anesthesia during this period and even the next was frequently relegated to the orderlies or any other available layman because it was not considered a worthwhile task for a doctor. One at times suspects that we are still confronted with the necessity of "living down" this attitude. It stems from ignorance; it is a human trait that the things that one does not know much about in his own field are sublimated to unimportance.

During the first quarter of this century much progress was made in anesthesia. One great step

was the introduction of local and spinal anesthesia with procaine. This gave methods that the surgeon could use himself with one important feature—he could improve his technique. Surgeons did nearly all the development of local and spinal anesthesia during this period. While these methods were not without hazard there was improvement in the methods and addition to medical knowledge. Another and perhaps the most important trend during this period was specialization in anesthesia by physicians. The physicians taught one another, and there was a beginning of good publications on anesthesia. By the end of this period there were many full-time anesthetists and still more physicians doing anesthesia on a part-time basis.

Another feature of this period was the introduction of the system of teaching nurses to administer anesthesia. This practice was not adopted in any other sizable country, partly because most of the countries considered giving anesthesia as the practice of medicine, and it could be done only by a licensed physician or dentist. In England, for example, midwives are trained and used, but the authorities considered anesthesia sufficiently important that nurses were not allowed to administer it. Whatever the merits of the system of using nurse anesthetists may have been in the past or are at the present, it is not a system that would have made for progress without physicians in the field. Regardless of past service rendered and future service to be rendered by nurses, they should not be allowed to stand in the way of progress. We must look further ahead than how we can get by today. We must consider what should be done to make progress in this field, particularly in our teaching institutions.

The last twenty-five years have exhibited the greatest progress in anesthesia, and the most important contributing factor in this progress is the introduction and use of improved teaching methods, and the improved dissemination of knowledge, most of which was known at the beginning of the period but by very few individuals. This teaching started in a few centers and gradually spread, until now there are many. This has been both the cause and result of increasing numbers of capable young physicians entering this specialty. This aspect of progress is far more important than the introduction of new drugs and methods, even though the latter have been outstanding in this period.

At the present time there are over 2,000 mem-



bers in one national anesthesia society alone, most of whom do anesthesia only part or the major part of their time. And there are many other physicians who have become proficient in administering anesthesia. It is a fair estimate that physicians administer one-half of the number of anesthetics and more than half of the important cases. There are many anesthesiologists who work as consultants on a fee-for-service basis. These men are generally called for the most difficult type of anesthesia and frequently are of service to their colleagues in many other ways. Therefore it is probable that more than half of the difficult cases are done by physicians. The other half of the administrations are done by nurses with varying degrees of training and ability. Some of this personnel are supervised by qualified anesthesiologists and some are not. To satisfy the legal aspect, most states have ruled that the surgeon may take the responsibility for the anesthesia and direct the nurse in what drugs to give.

There are many teaching institutions training anesthesiologists, and these physicians will spend the rest of their lives working in this specialty. Steps are also being taken to provide short or continuation courses in anesthesia for practicing physicians who do anesthesia on a part-time basis in many communities.

As already indicated, physicians in a community who want improvement can do much to help. If they have sufficient surgical work and will co-operate, they can secure a full-time anesthesiologist if he is given proper working conditions, namely, the same as they have. They must not expect him to work for a salary while they work for fees. They must help convince the hospital that the anesthesiologist is a physician and will work as such and not as a technician. We have found that many surgeons want professional anesthesia but do not want to be inconvenienced in any way to get it; others will arrange schedules to help, sell the idea to their private patients and treat their anesthesiologist as a colleague. The latter are the ones that find it possible to have the services of a professional anesthetist, enabling them to concentrate on the operation without worry about the anesthesia.

Hospital administrators and boards of directors can do much to help improve anesthesia for their patients. Some of them have already gone on record as opposed to professional anesthesia, unless the incumbent works on a salary for them. Fortunately, however, there have been and still

are many broadminded and far-seeing hospital administrators. These administrators, some physicians and some not, have done much to make progress in anesthesia. They have made teaching centers possible and even provided for research. We appreciate their co-operation and can say to them that they have done far more than they or anyone else realizes to advance the science and practice of anesthesia. To those who either have not encountered the problem or are contemplating how they can offer professional anesthesia in their hospitals, it can be said that they can get such service without much added cost in most communities unless they are already exploiting their patients by excessive anesthesia fees. But, unless their staff, particularly the surgeons, are interested, it is a difficult task and a very thankless one for the anesthesiologist. The most sought-for arrangement is a staff appointment with privileges to work on a fee-for-service basis the same as the surgeons do. If service is rendered to the hospital, such as supervising others, the hospital may expect to pay for this if the patient cannot. One recognizes that running a hospital without too much loss is not an easy task, but it appears that if progress continues as during the past twenty years, hospitals will not regret having made arrangements to permit and encourage anesthesiologists to help with their anesthesia problems in co-operation with the rest of the staff.

Considerable variation exists throughout the country in the personnel who administer anesthesia. It is true that there are different standards of practice in many aspects of medicine, but there is probably no branch of medicine in which there is such a range of difference in the standards prevailing as in anesthesia. Those administering anesthesia are nearly all included in this list:

1. Fully qualified anesthesiologists.
2. Physicians in training institutions supervised by anesthesiologists.
3. Physicians with limited training in anesthesia.
4. Surgeons giving spinal or local anesthesia with someone else watching the patient during the operation.
5. Surgeons giving spinal or local anesthesia without having anyone watch the patient during operation.
6. Interns and medical students under proper supervision.
7. Interns and medical students improperly or not supervised.
8. Nurses trained to administer certain types of anesthesia.
9. Nurses with little or no training.
10. Lay persons with little or no training.

There are all sorts of combinations of these existing in various hospitals. Such a mixture of personnel is good evidence that all too often the anesthesia must be the weakest link in surgical procedures.

The number of capable young physicians who are choosing anesthesiology as a specialty has increased a great deal. This is in part due to their special interest in this field, which is most apt to be aroused by examples of desirable practice in this specialty. As soon as all communities and our own profession learn to treat the medical anesthetist as a colleague and physician, we will be able to interest more capable young physicians in this specialty. The established teaching institutions for anesthesiology have continued for the last twenty years to make improvements in teaching anesthesia. All too often, members of the profession seem to feel that the poor anesthesia that exists throughout the country is the fault of teaching institutions. Training anesthesiologists requires time, and their placement after training will depend upon co-operation of local physicians and hospitals. The profession must learn that these anesthesiologists are well-trained physicians who can be of assistance to them in the care of patients. Anesthesia is a true consultation practice because the anesthesiologist has no patients of his own. The services we have to offer will allow the surgeons greater freedom to concentrate on the operation and save them enough worries so that they should not begrudge their anesthesiologist a living income. Many co-operative surgeons are willing to reduce their fees when necessary to have the service of an anesthesiologist. The internist should be interested in the safety and welfare of patients he refers for operation. He can use his influence to improve conditions. The general practitioner may be administering some anesthesia. Most of them are grateful to be relieved of this responsibility, and others for the opportunity to learn more about the specialty so that they may become qualified to continue with this work.

All physicians could use their influence to help persuade hospital administrators of the value of professional anesthesia. Some hospitals will not allow surgeons to bring in medical anesthetists or permit them on the hospital staff. This brings us to the problem of hospital boards and administrators. I appreciate that the business of managing a hospital with a minimum deficit is a complicated and oftentimes difficult task. However, I contend that the

primary purpose of a hospital should be to care for sick people and that no system which retards progress or prevents patients from receiving safe anesthesia is justifiable, even though it is a good source of revenue to the hospital. Also it is not fair to surgical patients because they are paying more than their share toward supporting the hospital. Hospital costs should be put where they belong—more on the room instead of on special services. Fortunately, many hospital administrators have for years been far-sighted and helpful in regard to anesthesia. To these, the medical profession owes much because they have made possible training centers and working places for those properly trained. One can predict that with increased interest in anesthesia by the American Medical Association, the profession and the public, hospitals that have made satisfactory arrangements for the services of anesthesiologists will not regret any apparent loss of income.

Hospital staffs are very careful about who is permitted to perform operations, but they do nothing to improve anesthesia over what it was some years ago. It is unfortunate to have capable surgeons handicapped, to have many operative procedures not carried out because of inadequate anesthesia, and to have many new anesthetic drugs and methods that cannot be safely used. This is many times the responsibility of the hospital staff; they must convince the administrators of these needs and take steps at least to have anesthesia properly supervised. Generally, anesthesiologists prefer to work on a fee-for-service basis the same as other physicians. There are a number of irritating factors involved in a physician being an employee of a hospital, particularly when others of the surgical team are not. These undesirable features are not absent in a hospital where all physicians are paid by salary, but one at least has company. Many hospitals, on the other hand, want to retain anesthesia as a hospital service.

The public is the least of our problems. An interested surgeon can sell his patients professional anesthesia very easily with a few sincere words. Patients do not object to paying a fee to the anesthesiologist when they understand the arrangement in advance and when the service has been properly rendered. This makes for a surgeon-patient-anesthesiologist relationship that is beneficial and necessary to all three for the best results.

At the present time, anesthesiologists are going

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# X-Ray Diagnosis in Pediatrics

By William A. Evans, M.D.

Detroit, Michigan

FOR A SUBJECT as comprehensive as the one which has been assigned, it has seemed of possible interest to examine in what manner radiological studies are of particular value in pediatric practice. For this purpose we have collected a series of cases conforming to the following criteria: (1) the x-ray examination resulted in a major contribution to the diagnosis, (2) the condition demonstrated was more or less characteristic of infancy or childhood, and (3) a specific effective method of treatment was available for the condition demonstrated. Rigid adherence to these criteria does not result in the selection of a large group of cases, as we have reviewed the material passing through the x-ray department of the Children's Hospital of Michigan in recent years.

The common respiratory infections and pneumonias have similar manifestations in children and adults except for the much more frequent occurrence of obstructive phenomena in infants. Indeed, obstructions of various types are a major factor in the mortality of respiratory infections in infants and young children. Atelectasis, emphysema and obstructing masses in the air passages may be well demonstrated in the x-ray examination, but obstructive symptoms are usually a prominent feature of the clinical picture in these cases. The location and extent of the pneumonic infiltration have not in our experience been of critical importance. The diagnosis of pulmonary tuberculosis in infancy and childhood usually requires a correlation of clinical, radiological and bacteriological evidence. Occasionally the diagnosis of an unsuspected miliary tuberculosis is made roentgenologically, but the results of treatment in this and other forms of tuberculosis in childhood have not been strikingly effective thus far.

The diagnosis of cardiovascular malformations and diseases is likewise best made by a combination of all available methods of investigation. X-ray studies, while often making a valuable

contribution, can seldom claim a major role in the final diagnosis.

Hypertrophic pyloric stenosis and intussusception, two of the most common and characteristic gastrointestinal lesions of infancy, can be accurately demonstrated by radiological methods, but in the majority of cases the history and clinical findings obtained by a pediatric surgeon are so characteristic that confirmation is not required. It is fair to state, however, that mistakes in clinical diagnosis are made on occasion and that perhaps more frequent radiological confirmation is desirable. At the present time in this hospital the x-ray is employed more often to exclude than to confirm the diagnosis of these conditions in doubtful cases.

In general, lesions of the genitourinary tract in infants and children do not meet the requirements for discussion here, but mention should be made of one recent patient with a severe hypertension and encephalopathy where intravenous pyelography demonstrated one small non-functioning kidney. This kidney was removed with prompt regression of the hypertension and encephalopathic symptoms.

Tumors, blood dyscrasias, and endocrine disorders are seldom discovered unexpectedly in x-ray examinations, although on occasion subperiosteal infiltrations and infiltrations of the metaphyseal areas of the long bones may point to an unsuspected diagnosis of leukemia or neoplastic metastasis in infants examined for pains in the joints. Rarely the osseous lesions of neurofibromatosis will be demonstrated before other clinical manifestations are evident.

Injuries and particularly fractures and dislocations have not been considered sufficiently different in children and adults, either in diagnosis or management, to come within the scope of this essay. Epiphyseal lines are often confusing in diagnosis to the inexperienced, and injuries at the epiphyseal line may result in growth disturbances peculiar to childhood, but these problems are not for discussion here. It is true that unexpected fractures are occasionally discovered in infants because the history and complaint are necessarily more uncertain in an inarticulate patient. A traumatic basis for a lesion in a very young patient must often be considered whether or not there is a history of injury.

Malformations and diseases of bones and joints can usually be accurately suspected by an experi-

From Children's Hospital of Michigan.  
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enced orthopedist, but proper x-ray studies will add precision to the diagnosis and offer a valuable guide to progress and treatment.

Rickets and scurvy produce precise and characteristic changes in the radiographic appearance of bones, but these diseases with rare exceptions should not occur in a well-regulated modern pediatric practice and will not be discussed here.

Also beyond the scope of this essay are such conditions as dysostosis multiplex, chondrodystrophy, melorheostosis, osteogenesis imperfecta, the various forms of rachischisis, arthrogryposis, hydrocephalus, and agenesis of the corpus callosum which have purely descriptive and perhaps arbitrary labels. Roentgenographic studies may add to the descriptive details, but at present the precise nature and etiology of these conditions are poorly if at all understood, and little or nothing can be offered for prevention or treatment.

It is not the practice at the Children's Hospital to make any routine x-ray examinations. Examinations are made on the basis of some feature in the history or some manifestation of abnormality. The x-ray is necessarily more widely used in the study of sick children than in adults because the history of an illness is often uncertain and misleading, because the complaints are frequently poorly defined in inarticulate patients, and because the physical examination is difficult. In this situation if a conscientious student were to list all the possibilities of diagnosis in a given case, the x-ray examination would hardly produce any surprises. Nevertheless, in the cases which I shall present, the x-ray examination did establish an unexpected diagnosis and one which could not readily have been made by other means. I do not mean to use these cases to boast of the value of the x-ray examinations but to point out some conditions which will not be suspected if they are not given more frequent consideration.

In the first group of cases are foreign bodies.

*Case 1.*—M.K. (K-5555), a four-year-old girl, had a foul-smelling discharge from the nose for six to eight months. A nose and throat consultant made a diagnosis of pansinusitis and advised adenoidectomy, but an x-ray examination of the sinuses was requested and an open safety pin was demonstrated in the left nares. A chronic unilateral foul nasal discharge should raise the suspicion of a foreign body.

*Case 2.*—G.B. (26057), a two-and-one-half-year-old boy, had a cold with nasal discharge and cough for three days. An attending physician prescribed a sulfa preparation which afforded no relief. Some bizarre

physical findings in the chest prompted an x-ray examination, and a complete atelectasis of the left lung was demonstrated. Then persistent questioning elicited the fact that the cough began when the boy was eating peanuts. Bronchoscopy revealed fragments of a peanut in the left main bronchus.

*Case 3.*—D.W. (27096), a nine-month-old girl, exhibited dyspnea and cough for seven days, and a physician diagnosed asthma. It was observed that she ate well, but an obstruction in the upper air passages was suspected and an x-ray examination ordered. A foreign body in the upper esophagus was demonstrated.

*Case 4.*—D.R. (D-3757), a one-and-one-half-year-old boy, was admitted to the hospital with fever, anorexia, and irritability for three days. There was some abdominal distention but no vomiting or obstipation. The clinical impression was nasopharyngitis and a large liver, due possibly to catarrhal jaundice or subphrenic abscess. An x-ray examination of the chest was ordered, and fortunately a sufficient portion of the abdomen was included in the study so that the foreign body could be demonstrated. This proved to be a bobby pin which had lodged in the duodenum, perforated into the liver, and caused a liver abscess. While many foreign bodies pass uneventfully through the gastrointestinal tract, it is well to remember that those which are long will have difficulty passing the relatively fixed loop of duodenum.

*Case 5.*—G.J. (26707), a five-year-old boy, slipped on a rug and bumped his left knee. The surgeon noted swelling over the tibial tubercle, suspected a "chip fracture" and asked for x-ray confirmation. A needle was demonstrated in the soft tissues.

It is to be noted that in none of these cases was there an original history of a foreign body, and in some no history was ever obtained. The possibility of foreign bodies should ever come quickly to the mind of a physician dealing with young sick children. They may occur in orifices and passages other than those mentioned above—in the ear canal, vagina, urethra, and urinary bladder, for example—and there are, of course, many foreign bodies which, having a density similar to that of the adjacent tissues, do not give direct evidence of their presence in an x-ray examination.

The second group of cases concerns two types of congenital malformations in the newborn which are gratifying to recognize because early diagnosis is important and because effective measures of treatment have recently become available.

*Case 6.*—A.C. (6573), a male infant, was observed to have a sudden onset of cyanosis and labored respiration at five days of age, at which time an x-ray examination showed a cystic emphysema of the right lung, displacement of the mediastinum to the left and a diminished



air content of the left lung. Further observation showed a progressive expansion of the right lung and a diminishing air content in the left lung. A diagnosis of expansile cystic disease of the right lung was made, and a right pneumonectomy was performed at one month of age. The section of the right lung confirms the diagnosis of cystic disease with numerous large and small cysts in the upper and lower lobes and a collapsed but otherwise normal middle lobe. Following the operation there was re-expansion of the left lung. Unfortunately this infant died on the seventh postoperative day with a tension pneumothorax on the right from a loosened ligature at the stump of the right lung, but there have been several reports in the literature of successful pneumonectomies in infants for expansile air cysts since the paper of Fischer, Tropea and Bailey in 1943.

*Case 7.*—H. (26065), a female premature negro infant, weighing 4 pounds 4 ounces at birth, suffered weight loss and vomiting. Stools were reported to be scarce but there was no evidence of abdominal distention. The x-ray examination of the abdomen on the seventh day of life showed gas in the small bowel with no gas in the colon, and a diagnosis of complete obstruction in the ileum was made. At operation a membranous area of atresia was found in the upper ileum. This was incised and there was a slow but otherwise uneventful recovery. This is a typical example of a variety of congenital obstructions in the bowel which may be recognized. It is noteworthy that in these cases there are often no clearly defined clinical signs of intestinal obstruction, particularly in premature infants, and that the history of stools is usually misleading. Early and accurate diagnosis is important because in the hands of skillful pediatric surgeons many of these congenital obstructions have been relieved in recent years.

The third group of cases concerns certain infections which may have absent or misleading clinical manifestations, where the x-ray examination offers an unequivocal diagnosis and an indication for specific treatment.

*Case 8.*—R.H. (20270), a three-month-old negro infant, had been crying and irritable since his sister had pulled his arm, and the arm was observed to be limp. An x-ray examination was ordered under the clinical impression of an Erb's palsy with the possibility of fracture. The examination disclosed a fracture of the humerus, but it was further observed that the fracture had occurred in an area of abnormal bone structure and it was suggested that the other long bones be examined. By this means the characteristic lesions of syphilis were found and a diagnosis of importance was made.

*Case 9.*—R.H. (3716), a five-week-old male negro infant, was admitted to the hospital with the history of a "cold," fever, vomiting and anorexia beginning three days previously. The clinical impression was that of an upper respiratory infection with constipation and pos-

sibly bronchopneumonia. The x-ray examination performed the day after admission was essentially negative. Two days later the respiratory rate rose from 66 to 100 per minute, and a second x-ray examination on the seventh day revealed a massive pyopneumothorax on the right. Thoracentesis yielded 80 c.c. of thick green pus containing staphylococcus aureus, and recovery occurred following further aspirations and the administration of chemotherapy.

We have come to recognize that empyema may be an early manifestation of respiratory infection in infants, that it is most commonly due to the staphylococcus, and that it is frequently associated with a bronchopleural fistula and pneumothorax. The rapid accumulation of pleural exudate causes serious respiratory embarrassment and threatens the life of the infant unless relieved. A further hazard is the occurrence of a tension pneumothorax from the bronchopleural fistula, and this also may be relieved by an accurate appraisal of the situation and preparation for appropriate measures.

### Conclusions

Radiology does play a role in pediatric practice, depending upon the familiarity of the radiologist with pediatric problems and the technical facilities and assistance available to him.

The x-ray examination may support or confirm a diagnosis which has been made, or it may make a diagnosis which has not been suspected. Sometimes conditions are revealed which lead to a specific and effective method of treatment.

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## RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE IN CHILDREN

(Continued from Page 1125)

exudative phase of polyarthritis may be controlled with adequate salicylate therapy, and the various forms of acute carditis may be treated along lines of a well-planned therapeutic regimen. Each phase of rheumatic carditis needs to be treated in a "specific" manner. The acute phase with salicylates, the protracted phase without congestive failure with oxygen, and the phase of failure with appropriate forms of dehydration therapy.

3. The quiescent phase of rheumatic disease offers a problem of rehabilitation rather than a distinctly medical problem.

4. The problem of prevention of rheumatic onsets or recurrences remains, for the most part, unsolved.

# Adenocarcinoma of the Fundus Uteri

By Charles S. Stevenson, M.D.  
Detroit, Michigan

THE DESIRABLE management of any malignant lesion is its elimination in such a way that recurrence is unlikely and the patient's survival assured. That this, in many instances, is a difficult goal to attain is familiar to most of us. Carcinoma of the fundus, or corpus uteri, however, plays *fairly* in that it gives ample warning of its presence.

It begins primarily as a localized endometrial growth and, with few exceptions, tends to spread comparatively slowly. This fortunate association of events makes fundal carcinoma much more adaptable to complete eradication than is the case with malignancy in other organs and parts of the body. Unlike a cancer of similar extent in the cervix uteri, in which parametrial and lymphatic extension occurs much more promptly, it grows slowly by direct extension and spreads slowly through the lymphatics.

About 80 per cent of women who develop fundal carcinoma are past their menopause, and in this group the average age is about fifty-nine years; four out of five patients with this type of cancer are over fifty years of age. This group of women tends to show some fairly definite characteristics, in that a preponderance of them are obese or relatively obese. There is also a rather high incidence of hypertension among them, usually with varying degrees of arterial and renal change. This group contains more than just the occasional diabetic, and, strikingly, there is an absence of anemia in the vast majority. Postmenopausal bleeding in these women has been due solely to endometrial carcinoma in a good proportion of cases. Roughly a third of them have never been pregnant, and of these about one-half have never been married. Most of them have had menorrhagia in the premenopausal and menopausal epochs, and their postmenopausal bleeding has occurred anywhere from one to twenty-six years after cessation of menses.

With regard to the 20 per cent of women who are found to have fundal cancer *prior* to the cessation of menses, the age limit is from about forty

to fifty years, although some women in this group may be under forty. *Menstrual irregularities of any type* may be the only symptom of the disease, and this is unfortunate, as such irregularities are fairly common in the premenopausal and menopausal epochs of a woman's life, and she may accept them as a not unexpected feature of "change of life." Hence, she may give the disturbance little thought unless the bleeding is either too profuse, uncomfortably annoying or merely inconvenient. So medical advice usually is not sought promptly enough. On the other hand, it is not too uncommon for a fear of learning the truth, or a woman's undue sense of modesty, to contribute to this delinquency. Fortunately, both of these factors today are probably playing less of a role in the delay in reporting to her doctor than they did formerly, and this gratifying change is a result of the general campaign for educating the public concerning the commoner forms of cancer and their symptoms and signs.

Granting that a certain proportion of the delay period preceding recognition and treatment of fundal carcinoma stems from the ignorance or indifference of the woman herself, it is only too true that the physician first consulted is often the one responsible. He may believe himself to be too busy to examine his patient properly or may be reluctant to do so "when she is bleeding." Many a writer and lecturer has called attention to the injudicious and indiscriminate use of endocrine therapy employed to "control" bleeding at this time of life, and I cannot condemn this practice too strongly. We know that 10 milligrams of testosterone given daily by mouth may stop uterine bleeding, and that frequently repeated injections of 25 milligrams of stilbestrol will do the same, but any woman in this age group who has *abnormal uterine bleeding*, be it menorrhagia or metrorrhagia, deserves a thorough curettage of the uterine cavity and cervical canal, plus adequate biopsy of the cervix, in order to rule out uterine cancer.

Another hazard is that of diagnostic error. Pelvic examination may disclose the presence of myomata of the uterus, and the abnormal uterine bleeding may be attributed solely to their presence. An inadequate operation, in the form of a supra-cervical hysterectomy, may then be done, and an accompanying endometrial carcinoma may be found, not by the surgeon but by the pathologist. Or a conspicuous polypus of the cervix may be seen and considered to be the source of the ab-

Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 25, 1949.  
From the Department of Obstetrics and Gynecology, Wayne University College of Medicine, Detroit, Michigan.



normal bleeding; it may be removed and the patient sent home, only to bleed abnormally again the next month, while the carcinoma within the uterus remains undiscovered and undisturbed for another month, at least, because of the failure of the doctor to curet the uterine cavity in addition to removing the polyp. Tragedy, in these cases, might well have been averted by the cancer-conscious practitioner who would first have carried out diagnostic curettage to discover or rule out that possible adenocarcinoma of the endometrium lurking behind the screen of the more apparent possible anatomic sources of such abnormal bleeding.

These errors of omission and commission are really too frequent. Constant vigilance must be exercised—first, by the family doctor in evaluating the cancer potential of abnormal premenopausal bleeding, and second, by the surgeon alert to the possibility that fundal cancer may accompany an obviously benign uterine lesion—if correct diagnosis and appropriate treatment are to be attained.

The diagnosis of fundal carcinoma in all cases should be made by the microscopic examination of uterine curettings. It must be remembered that there is considerable variation in the histologic picture presented by fundal carcinoma. The majority of the lesions fall into the low-grade malignancy group—papillary adenoma malignum being histologic grade I, and adenoma malignum grade II. A lesser proportion of cases represents an intermediate grouping—adenocarcinoma grade III. The solid cellular types, or diffuse anaplastic adenocarcinomas, are grade IV; they are the least common and are of a very high grade of malignancy. Adenoacanthoma is the rarest form of endometrial carcinoma and may be found in any of the four grades of malignancy, but is most commonly found in grades I and II. It is characterized by a squamous metaplasia of the otherwise single layer of carcinomatous cells which line the gland-like spaces. The prognostic value of this classification is indicated by the fact that in 800 cases of endometrial cancer graded in this manner, Broders reported good results in 90 per cent of grade I, 62 per cent of grade II, 25 per cent of grade III and 10 per cent of grade IV.

The clinical grouping of fundal cancer is by no means standardized, and various plans are in vogue in different clinics. At present the Health Organization of the United Nations is working on such a grouping of cases for international use. This

grouping probably will be based upon the gross extent of the disease as interpreted by the examiner, upon the comparative size and passive motility of the uterus when examined, and upon the presence or absence of general signs of extension of the growth, such as cachexia, evidences of peritoneal spread and palpable extra-uterine tumor masses.

The treatment of carcinoma of the uterine body has been both surgical and irradiative, and today most clinics in this country are using both in various combination techniques.

From the pioneer abdominal total hysterectomy of Freund in 1878, from the later techniques of Werder and Wertheim, together with the technical refinements of Ries and Clark, we have come a long way to the present-day masterly procedures of Victor Bonney, Daniel Morton, and of Joe V. Meigs. The present surgical technique calls for the abdominal approach and division and ligation of both infundibulo-pelvic ligaments before the uterus is handled. This is done in order to decrease the chances of possible lymphatic spread to the iliac regions. Then the tubes and ovaries, working medially, are separated from the broad ligaments, and the round ligaments are divided at least 1 inch from the fundus. With upward traction on the uterus and its attached adnexae, the broad ligaments are bluntly stripped away from the lateral aspects of the uterus, and the vesical fold of peritoneum is transversely incised, and it and the bladder are pushed down off the lower anterior surface of the uterus and of the cervix. The uterine vessels are ligated and divided from the uterus. The attachments of the cardinal ligaments, with their contained cervical vessels, are next ligated and divided from the cervix, and the cervix is excised from the vagina at a level which allows removal with it of a skirt of vaginal vault at least 1 centimeter in length. Any surgical procedure less radical than this is inadequate.

This dictum is based upon the fact that the dissemination of carcinoma of the fundus is chiefly through the lymphatics that drain the uterine body, although direct extension along the Fallopian tubes is also of importance. In advanced cases the disease may extend well into the cervical canal, so that gross examination of the surgical specimen may make it difficult to ascertain whether the disease has originated in the cervix or in the body. At operation in an advanced case it is essential to examine the lumbar group of glands, situated

near the lower end of the aorta, as well as the upper hypogastric glands near the bifurcation of the iliac vessels, as metastasis tends to take place to these lymph nodes. Metastasis to the ovary occurs in about 5 per cent of cases. Some of the cancer may also be found in the fallopian tubes, and it is of interest to note that metastases to the tubes are often found to be submucous and interstitial, which speaks for the importance of the lymphatic route rather than implantation as a means of spread. In advanced cases there may also be involvement of the peritoneum, omentum, cervix, bladder or rectum. Surgical excision of all of the tumor, as radical as is necessary and as the patient's condition will allow, should be accomplished.

Irradiation therapy is of great help and should always be carried out preoperatively whenever possible. If not, it should be given postoperatively. About eight years ago three different methods for treating endometrial cancer at three separate clinics in this country were put into practice in order to build up separate comparative series of cases. At the Jefferson Medical College Hospital in Philadelphia preoperative intra-uterine radium is used, followed by panhysterectomy in from four to six weeks; intra-uterine radium preoperatively and deep x-ray postoperatively is the method being followed at the Johns Hopkins Hospital in Baltimore; and at the University of Michigan Hospital preoperative deep x-ray is given. While differences of opinion exist with respect to whether radium or x-ray is superior in the part that preliminary irradiation plays and just how these factors should be employed, the facts remain that, when suitably used, preoperative irradiation seems to be responsible for certain accomplishments in the improvement of five-year survival rates.

Irradiation tends to promote local devitalization and attenuation, if not complete destruction of the growth. It also accomplishes reduction of infection and, perhaps, some sort of sealing off of the lymphatics, thus lessening the possibility of cancerous dissemination when an operation is subsequently done. Preoperative irradiation is not used with the expectation of eliminating the lesion, but for the reasons just stated. Some residual cancer is observed in about 50 per cent of uteri removed surgically subsequent to irradiation.

There is always a group of patients in whom, due to unalterable complications such as heart disease, excessive obesity, or some other contra-

indications to operation, irradiation alone can be used. The constant improvements being made in methods of irradiation may better our statistics in cases in which this is the only type of treatment permissible. No matter how poor a patient's condition may be at the time of irradiation therapy, she should be followed closely for months or years and should have surgical removal of the uterus and adnexae at the first opportunity provided by an improvement in her general physical condition, or by an improvement in anesthesia or surgical technique.

Treatment with intra-uterine radium alone has given a five-year survival rate of about 50 per cent, while with deep x-ray alone the figure is less. With operation alone from 50 to 60 per cent of women survive for five or more years. With the newer techniques of combined irradiation and operation, from 70 to 80 per cent of patients with fundal cancer are surviving for five years and longer, and our techniques will undoubtedly improve even more and will yield an even higher rate of cure in the coming years.

But more important than this matter of the improvement of treatment techniques is *earlier diagnosis* and the *prompt institution of proper treatment*. We would be amiss if we did not emphasize that the greatest responsibility for the improvement of survival rates in this disease rests upon the physician's shoulders. He must educate his patients regarding the symptoms of cancer, see to it that all women with abnormal *uterine* bleeding, if they are thirty-five to thirty-eight years of age or older, have at least a diagnostic curettage, and, should cancer be found, make certain that proper treatment is carried out without delay.



## THE PHYSICIAN AND COMMUNITY ACTION FOR RHEUMATIC FEVER

(Continued from Page 1132)

services, he, today more than ever, holds the place of leader in the control and prevention of disease.

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# Systemic Bacitracin in Surgical Infections

By Frank Lamont Meloney, M.D.  
New York, New York

**B**ACITRACIN was discovered in the Bacteriological Research Laboratory of the Department of Surgery of Columbia University in June, 1943. It was demonstrated to be active against a wide variety of disease-producing bacteria and was found to be of low toxicity.

Its commercial production was accomplished first by the Ben Venue Laboratories of Bedford, Ohio, and later by the Commercial Solvents Corporation of Terre Haute, Indiana. During the gradual improvement of commercial production, the antibiotic was used in more than 200 cases of localized surgical infections by the injection of the solution or the application of an ointment containing the antibiotic, and favorable results were recorded in 87 per cent of these cases. Similar gratifying results were obtained in skin and eye infections by the local application of bacitracin ointments or solutions.

In September, 1948, the Food and Drug Administration gave its consent for the general distribution of bacitracin to practitioners of medicine for local injection or application of the solution or ointment or for oral medication.

Up to the present time, over 200 cases of generalized infections have been treated by the intramuscular injection of bacitracin with favorable results in about two-thirds of these cases. More than half of this series have been cases which have failed to respond to penicillin, streptomycin or the sulfonamides, either alone or in combination.

At the same time similarly gratifying results were obtained in dermatological and ophthalmological infections by local application of ointments or solutions. In its relatively crude state, it was effective when applied to local infections, but it had not yet become standardized nor had it been obtained in a sufficiently pure state to warrant its systemic administration.

Pharmacological studies demonstrated that bacitracin was without evidence of toxic action to any organ or tissue of the body of experimental animals, except for local irritative effects on the tubules of the kidneys of mice and to a lesser de-

gree of monkeys. Rabbits, rats and dogs seemed to be unaffected.

The systemic administration of bacitracin by intramuscular and subcutaneous injection was begun cautiously and with gradually increasing confidence, as it was demonstrated that, although traces of albumin and a few granular casts appeared in the urine, they disappeared during the course of treatment or shortly after its cessation. During 1947 and the spring of 1948, a gradually increasing number of cases of generalized infections were treated systemically with the product of the Ben Venue Laboratories, produced by surface growth, in doses ranging from 3,000 to 50,000 units every six hours, with a control of the infection in the great majority of cases.

Blood levels could be obtained and maintained for a period of six hours by the subcutaneous or intramuscular injection of solutions containing 10,000 to 30,000 units per c.c. and in doses ranging from 3,000 to 50,000 units, but administration by mouth in doses as high as 250,000 units seldom showed absorption into the blood stream and only minimal levels in the urine. On the other hand, high concentrations of the antibiotic could be found in the stools following oral administration.

It was found that *Endameba histolytica* was susceptible to bacitracin *in vitro*, and administration by mouth demonstrated its ability to bring the symptoms of amebiasis under control with rapid healing of the lesions.

In January, 1946, the Food and Drug Administration set up certain specifications for potency, stability, solubility, toxicity, and pressor, depressor and pyrogenic effects of bacitracin for all manufacturers to meet.

An extraordinary synergism between bacitracin and penicillin has been demonstrated by Dr. Harry Eagle in the cure of experimental syphilis, and a series of human cases has been treated with bacitracin alone and with bacitracin in conjunction with penicillin. Dr. Edward Reisner has found bacitracin effective in the treatment of pneumococcus pneumonias of various types.

Bacitracin was first made by the deep tank method by the Commercial Solvents Corporation. This became available for the first time in January, 1948, and was used from January to June of 1948. But although they met the specifications of the Food and Drug Administration, certain lots were found to be more toxic than the Ben Venue product, and confidence in the systemic adminis-

Abstract of paper read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 25, 1949.

tration of the drug was temporarily shaken. In fact, the systemic treatment of patients had to be halted until this difficulty could be overcome and uniformly less toxic lots became available. These were first used in July, 1948.

During the summer and fall of 1948 it was demonstrated that the product of the Commercial Solvents Corporation, meeting a toxicity level of an LD-50 of 500 units for a 20-gram mouse, could be given safely in doses which were clinically effective and which produced only transient or inconsequential evidences of kidney toxicity.

Bacitracin has been able to cure experimental staphylococcal meningitis in dogs and can be given subdurally or intrathecally in human beings in concentrations of 1,000 units per c.c. and doses of 10,000 units without signs of irritation or toxicity. Bacitracin powder can be applied to the brain surface and the solution injected into its substance without causing the irritation or convulsions characteristic of other antibiotics or antiseptics.

In September, 1948, the Food and Drug Administration gave its consent for the general distribution of bacitracin to practitioners of medicine for local injection or application of the solution or ointment or for oral medication, but distribution for systemic administration is being held up until its safety has been fully demonstrated.

Bacitracin is being thoroughly studied to demonstrate the nature of the residual toxic elements and studies are being carried out by counter-current, chromatographic, ultracentrifuge, electrophoretic and chemical methods in an effort to separate the toxic factors or to nullify the toxic action.

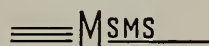
In the meantime, clinical studies are being continued in New York, Philadelphia, New Orleans, San Antonio and Cincinnati under carefully controlled conditions in order to demonstrate further the indications and limitations of this new antibiotic in the treatment of infections.

Up to February 15, 1949, the records of 205 cases of generalized infections, exclusive of pneumonia and syphilis, had been submitted by the five units which had been set up for the clinical appraisal of systemically administered bacitracin, with favorable results in 64 per cent of these

cases. More than half of this series were cases which had failed to respond to penicillin, streptomycin or the sulfonamides, either alone or in combination. Fifty-six per cent of these cases have been "salvaged" by bacitracin, while the favorable results in cases not previously treated approached 80 per cent.

There is increasing evidence that organisms causing infection in man are demonstrating a steadily increasing resistance to penicillin, streptomycin and the sulfonamides. Many of those which are present in mixed infections are capable of producing penicillinase and thus render treatment by penicillin impotent. Many of these are susceptible to bacitracin which is not inactivated by the penicillinase producers.

This clearly demonstrates the need for an antibiotic with the attributes of bacitracin.



## ANESTHESIA—THE WEAKEST LINK IN THE SURGICAL PROCEDURE

*(Continued from Page 1147)*

to communities that offer the best working conditions. Most of them want to administer anesthesia and not just act as a trouble-shooter for several less competent anesthetists; although this is a valuable service under many circumstances, it is not a condition that has led to continued improvement in many communities. Physicians will choose anesthesia in greater numbers only when they see these specialists treated with the same respect as others.

### Summary

The majority of the medical profession admit that anesthesia is important, and some admit that it should be administered by a properly trained physician. An attempt has been made to point out the part that the profession must take in bringing about improvement in anesthesia for their patients. The anesthesiologist seeks professional standing equivalent to other physicians in the community, and at the present time such localities are attracting these specialists.

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# The Practical Uses of Physical Medicine

By Frank H. Krusen, M.D.  
Rochester, Minnesota

AT EXACTLY 8:15 on the morning of August 6, 1945 (Japanese time), an atomic bomb flashed over Hiroshima and thus opened the atomic era (the age of physics).<sup>8</sup> We physicians who have fostered the development of the practical applications of physics to medicine had frequently deplored the apathy of our colleagues toward the growing importance of our specialty, but this apathy almost disappeared with the opening of the atomic era. Seldom, if ever, has a pioneering group had a more devastatingly convincing demonstration of the tremendous power of the agencies in which they were interested than did the leaders in the physical sciences when the atomic bombs fell on Hiroshima and Nagasaki. But if this were not sufficiently convincing, then one could read the official report on "Atomic Energy for Military Purposes" by Smyth in which it is said: "A weapon has been developed that is potentially destructive beyond the wildest nightmares of the imagination. . . . It is to be remembered that the energy released in uranium fission corresponds to the utilization of only about 0.1 per cent of its mass. Should a scheme be devised for converting to energy even as much as a few per cent of the matter of some common material, civilization would have the means to commit suicide at will."

This statement of a great scientist surely must convince anyone, utterly and completely, of the tremendous power of the physical forces now within our grasp.

Yet also, not only do physical agents have enormous power but they make it possible to explore fields of such vast magnitude that our physical scientists, in pushing out the frontiers of knowledge, are reaching toward the very limits of infinity.

Physicists in their quest for knowledge have built at Mt. Palomar a telescope which will make visible objects that are twice as far away as those seen through the Mt. Wilson telescope; with the latter, stars 500 million light years distant have

been photographed—and light travels 6 trillion miles a year. So, the new telescope should make it possible to see into space for a distance of 6 billion trillion (6,000,000,000,000,000,000,000) miles, stretching out toward the very limits of the infinitely large. It may even give some inkling as to whether the universe is finite or infinite.

Small wonder that Goodman wrote:

"Man, through the vast new lens at Palomar, May bridge the ultimate void from star to star."

Physicists have also developed for medical research the electron microscope which will magnify objects photographically 100,000 times.<sup>18</sup> This new microscope can render visible objects which are a fraction of an angstrom in size (an angstrom is 1/254 millionth of an inch), thus stretching down toward the very limits of the infinitely small. For example, when we compare the best ordinary optical photomicrograph of *Bacillus coli*, made under the high-power oil-immersion lens, with an electron photomicrograph of *Bacillus coli* magnified approximately 100,000 times, a tiny dot becomes a huge zeppelin-like object in which we can observe an infinite variety of detail never previously seen.

So today, physics has given us the power to see with our own eyes either objects which are almost infinitely small or through distances which are almost infinitely large.

The Palomar telescope and the electron microscope indicate the vast magnitude of the fields explored by physical science, just as the atomic bombs indicate the tremendous power of physical agents.

Today we physicians have physical agents of tremendous power and of vast magnitude which can be, and are being, put to practical uses for the diagnosis and treatment of disease and disability.

These practical uses of modern physical medicine are closely integrated with the amazing development of physical forces in the world as a whole. One cannot discuss the one without considering the other. It was the knowledge of physicists which brought about the cataclysmic changes that opened the "age of physics." The applications of physics to medicine must ride along with the amazing development of physics on a global scale. In fact, through our efforts must come some of the steps toward bending the great forces of physics to man's benefit rather than his annihilation.

<sup>8</sup>Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 24, 1949.  
<sup>18</sup>From the Section on Physical Medicine, Mayo Clinic, Rochester, Minnesota.

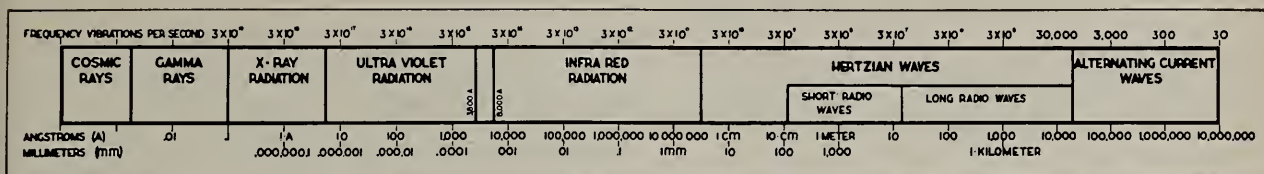


Fig. 1. The electromagnetic spectrum.

My purpose will be to acquaint you with some of the new and practical developments in the rapidly expanding field of physical medicine which may help somewhat to divert various physical forces toward the advancement of human welfare rather than toward the demolition of the world.

Two years ago, Raymond B. Fosdick,<sup>4</sup> president of the Rockefeller Foundation, said, "Man is confronted with the tragic irony that when he has been most successful in pushing out the boundaries of knowledge, he has most endangered the possibility of human life on this planet. . . . Can education and tolerance and understanding run fast enough to keep us abreast with our mounting capacity to destroy?"

Having faced squarely the fact that these new physical forces possess fearful potential dangers, can we see any ray of hope piercing these dark clouds which are threatening global disaster?

Yes! There are several feeble beams struggling through the gloom. Bernard M. Baruch has said, "Behind the black portent of the new atomic age, lies a hope which, seized upon with faith, can work our salvation. . . . Science, which gave us this dread power, shows that it can be made a giant help to humanity."

And J. H. McGraw, Jr., sounded the keynote when he said, "At one giant stride our scientific and technological development has so far outdistanced our social engineering that we have no choice but to turn our full powers of creative imagination to control the forces we have unleashed and to bend them to man's use rather than to his destruction."

This year, Fosdick<sup>5</sup> said, "All centuries are dangerous. . . . It is the business of the future to be dangerous. . . . On the whole, the great ages have been the unstable ages. This is the ray of hope that lightens the darkness of the present hour."

Our duty as physicians in this "age of physics" then becomes evident. We must accept the fact that we are living in a dangerous and exciting

age which, because of this very fact, may become the greatest of all ages. We must each strive to do a little bit to turn these physical forces of such vast magnitude and tremendous power to man's benefit.

J. Robert Oppenheimer said recently that we should be "very sensitive to all new possibilities of extending the techniques and patterns of science into other areas of human experience." He added also that we should try to give substance "to the feeling that a society that could develop atomic energy could also develop the means of controlling it."

Our task becomes clearer. No single one of us can do much, but if all of us work toward a common goal of harnessing these physical forces and reining them along roads which will lead to good instead of evil ends, our united efforts may benefit rather than destroy mankind.

One who is unaware of the wide variety of practical uses of physical medicine should consider the electromagnetic spectrum (Fig. 1). He will note one narrow band (the gamma rays) which is the province of the therapeutic radiologist and another narrow band (the roentgen rays) which is the province of the roentgenologist. Then he may be astonished to find the extent of the spectrum which is the province of the specialist in physical medicine, who applies ultraviolet radiation, infra-red radiation, short and long radio waves and also alternating current waves.

In addition to all this, there are included within the field of physical medicine kinesitherapy (the employment of therapeutic exercise and mechanical devices), hydrotherapy, cryotherapy, massage, manipulation, occupational therapy and physical rehabilitation of the disabled.

Physical medicine can really be thought of as applied biophysics.

The medical specialist in physical medicine is now commonly called a "physiatrist." The term "physiatrist" stems from the two Greek words "physis" (pertaining to physical phenomena) and "iatrikos" (pertaining to a healer or physician).



Thus a physiatrist is a physician who employs physical agents.

*Occupational therapy* can be defined as medical-ly prescribed activity which has a therapeutic objective.

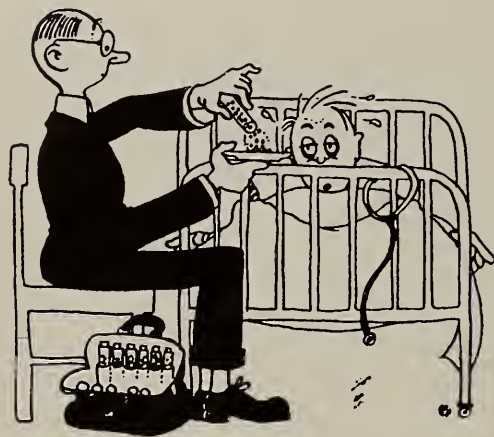


Fig. 2. The medical era of pills, powders and potions.

*Rehabilitation* can be defined as the preparation of the patient—physically, mentally, socially and vocationally—for the fullest possible life compatible with his abilities and disabilities.

There are many practical applications of physical medicine which can be used by physicians in the great universal struggle to guide the physical sciences away from destructive and toward constructive applications.

Lion recently employed two amusing cartoons to illustrate the influence of physical medicine on the physician.

The first picture (Fig. 2), said Lion, depicts the physician as he practiced before the introduction of physical procedures had influenced his activities. I have called this "a picture of the medical era of pills, powders and potions."

The second picture (Fig. 3) depicts the physician as he will practice in the modern age of physics. I have called this "the medical era of sine waves, slide rules and Sigma Xi keys."

The physician of the future will employ fewer drugs and more physical devices.

That physical medicine is growing rapidly is indicated by the fact that in a recent survey Selle found that 72 per cent of the fifty medical school deans whom he questioned planned "to improve the instruction in medical physics" in their own schools. Several medical centers are developing electromyography (the study of action potentials

in various muscular diseases) and later the physician may be using electromyographic apparatus just as he now employs electrocardiographic devices. Several centers are studying infra-red and ultraviolet radiation, and such studies may lead

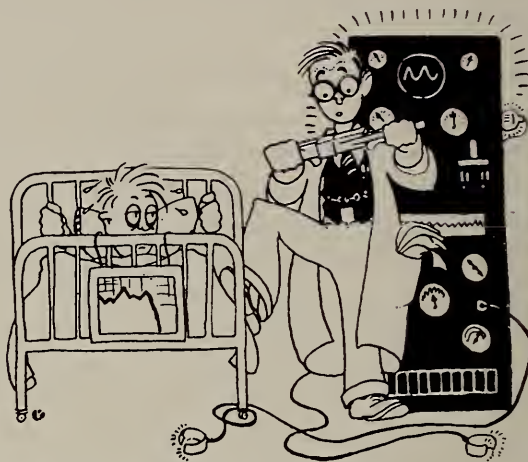


Fig. 3. The medical era of sine waves, slide rules and Sigma Xi keys.

to new and more practical types of infra-red and ultraviolet lamps. Some of the centers are studying physical fitness, and these studies may lead to more practical methods of determining the functional capacity of a patient for a task. Finally, some of the centers are working with problems of rehabilitation of the disabled. The establishment of community rehabilitation centers<sup>21</sup> to aid in restoring the estimated 23,000,000 handicapped American citizens to useful activity is of great practical importance to modern industry.

The center at Harvard is studying heavy resistance exercise therapy. During the war, military and civilian physicians, stimulated by the work of DeLorme, found that low repetition, high resistance exercises were very useful for restoring the power of weakened muscles. Special devices for providing graded amounts of weights to be lifted by different groups of muscles are being developed.

The center at Medical College of Virginia is studying and perfecting ergographic and ergometric devices. In the quest for more accurate methods of measurement of the results of therapeutic exercise, a logical step has been the development of the ergograph to record work done in muscular exertion and the ergometer to measure the force of muscular contraction.

The Baruch Laboratory at Massachusetts Institute of Technology has been interested in such

practical new physical devices as the electronic stethoscope, consisting of a microphone and a suitable electronic amplifier, to reproduce heart sounds for large audiences. This laboratory is also interested in new physical therapeutic procedures such as electric shock therapy and "the promising field of electronarcosis."

At my own institution my colleagues and I have found that there are many simple minor modifications of commonly used medical equipment which may increase their practical value and effectiveness. In the field of light therapy, until about fifteen years ago, physicians frequently prescribed small heat lamps provided only with a handle. Studies by my associates, Elkins and Sheard, indicate that effective heating from such lamps cannot be obtained in less than twenty to thirty minutes. It is impractical to hold a lamp in one's hand in a fixed position for so long a period. So, in 1936, I<sup>9</sup> described a single clamp lamp which did not have to be held in the hand. This has come into common use and is now manufactured and distributed rather widely.

Physicians frequently employ infra-red bulbs which produce both a bright light and much penetrating near-infra-red radiation. The glare of these lamps is sometimes annoying, and a few years ago one manufacturer of infra-red lamps produced a bulb of special black glass which, unlike most dark glass, still lets through the near-infra-red rays but cuts out the glare. These were just what we physicians wanted, but it was soon found that the glass absorbed so much heat that the gas in the bulbs expanded and they exploded. They were promptly taken off the market.

It then occurred to me<sup>10</sup> to employ a lamp with a filter disk made of this same special black glass, covering the face of the reflector. An ordinary bright infra-red bulb lies behind the filter disk, and the explosion hazard is eliminated. I have not yet checked fully the transmission characteristics of this filter, but I have used it long enough to believe that it is safe. I think the idea might well be developed.

In the field of heat therapy, I<sup>11</sup> described, a few years ago, a practical conductive heating apparatus for applying heat to all surfaces of the shoulder. Because of its irregular contours, the shoulder is very difficult to heat uniformly on all surfaces. This device is merely a specially constructed, thermostatically controlled, heated garment similar to the electrically heated flying suits

employed during the war. It fills a very useful purpose.

In the field of exercise therapy, physicians have long been searching for simpler and more practical methods of measuring the range of motion of joints. For this purpose there has been devised a new type of optical goniometer which can be carried easily in the pocket and can be used for quick measurements of the range of motion of joints. It was developed in the Section on Physical Medicine at the Mayo Clinic by Wilmer and Elkins. In the field of electrotherapy, we have been studying the problem of electrical stimulation of muscles. During and since the war, an extensive study of this procedure has indicated that, after injuries of nerves, electrical stimulation will lessen atrophy or wasting of temporarily paralyzed muscles. My research associate, Wakim, has recently reported to the American Physiological Society on our studies<sup>22</sup> of the effects of such stimulation on the circulation in normal and paralyzed extremities.

Of all of our studies in this field, those which have given us the greatest satisfaction have been those which were directed toward the major objective that I mentioned earlier, that is, the conversion of those physical forces which were employed for war to peaceful medical applications which may benefit mankind.

The three great physical weapons of war which we of the medical profession are now striving to convert to medical uses are: *radar*, which is said to have "won the battle of Britain"; *atomic energy*, which hastened the final defeat of Japan; and *sonar*, which aided in our supremacy of the seas.

*Radar or microwave diathermy* is one of the most interesting and perhaps most promising of the new agents employed in physical medicine. We have been particularly interested in this subject and published the first paper on heating of living tissues with microwaves (radar waves) in May, 1947.<sup>12</sup>

Whereas short wave diathermy currents have a frequency of 10 to 100 million cycles per second, microwave diathermy currents have a frequency of 3 billion cycles per second. An experimental model of a portable microwave diathermy apparatus (Fig. 4) has been developed which weighs less than 40 pounds (about 18 kg.). The radiation is directed along a beam, much like infra-red rays, but penetrates like short wave diathermy and



apparently is absorbed even better. The radiation produces definite increases in the temperature of the skin, subcutaneous tissues and muscle, at least to a depth of 3 cm., and also produces a marked increase in flow of blood.

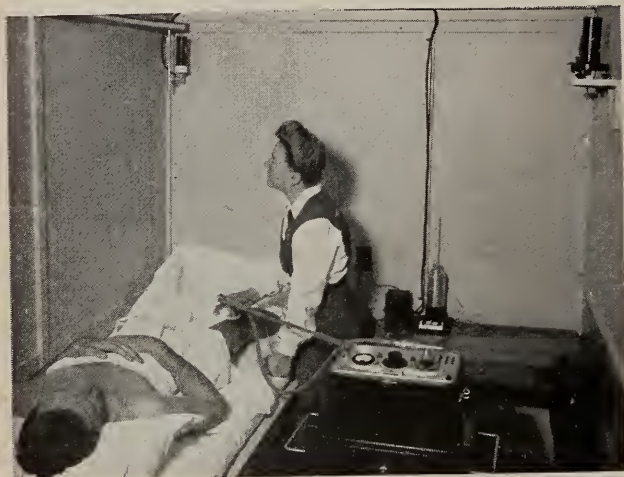


Fig. 4. Experimental model of portable microwave diathermy apparatus.

I believe that you will hear much more about microwave diathermy in the next few years, and that this great physical weapon of war will be of great practical value in fighting disease and relieving suffering.

The medical applications of *atomic energy* are increasing speedily. Radioisotopes, produced in atomic piles or by the cyclotron, are already being employed extensively in medical research and also in therapy.

Of greatest practical importance in medicine is the use of radioisotopes as tracers to follow the action of certain drugs and chemicals in the living animal. The tagging of atoms through their radiations offers promise of almost limitless advances in the fields of chemistry and physiology.<sup>13</sup>

In addition, radioiodine is being employed to treat some patients who have hyperthyroidism, and radiophosphorus is being used to treat polycythemia vera.

Radioisotopes may be employed as a simple substitute for roentgen rays to provide a safe, practical and inexpensive method of taking ordinary roentgen-ray pictures.<sup>17</sup>

It is encouragingly apparent that the powers of atomic energy are being converted quickly to beneficial and enormously promising medical purposes, especially in research.

*Sonar* or *ultrasonics* has also interested our re-

search workers, and last year I asked my associate, Dr. J. F. Herrick, of our Institute of Experimental Medicine, to begin some investigations in this field. The term "ultrasonics" refers to vibrations which are above the audible frequencies for the human



Fig. 5. \* Experimental model of ultrasonic therapy apparatus.

ear. The range of audible frequencies is from 16 cycles to 20,000 cycles per second. A material medium is necessary for propagation of these waves. Sound waves travel at the slow rate of approximately 330 meters per second in air as compared to electromagnetic waves which travel 300 million meters per second.

For some time Dr. Herrick has been experimenting with an ultrasonic device (Fig. 5) which produces high frequency sound waves of 800,000 cycles per second. At present it is purely an experimental device, but later it may be found to have certain practical applications. We do know that when applied to certain tumors in living animals, these sound waves produce changes in the nuclei and cytoplasm of the cells which form these tumors.

The investigation of the possible medical applications of ultrasonics will be a fascinating task.

These are some of the newer practical uses of physical medicine which are contributing to the diversion of the powerful physical forces, which threaten the destruction of civilization, into constructive channels which may lead to a better life for all mankind.

We physicians must assume leadership in the important task of developing practical uses of

(Continued on Page 1168)

# Cancer Research

By Harry S. N. Greene, M.D.

New Haven, Connecticut

THE STUDY of cancer—its character and recognition—has led to almost unlimited fields of investigation. Surgical pathologists have attempted for many years to transplant the growth into other sites and animals for the sake of research study. The diagnosis of cancer is difficult, for many tissues have a resemblance, and the only sure diagnosis is made by determining the behavior of the tissue. Cancer tissue has taken on a characteristic of independent growth with power of metastasis.

Malignant tissue has been transplanted for years from the host to other animals of the same species, but all attempts to transplant to other animals—laboratory animals, rabbits, for example—have universally failed. Dr. Greene in his laboratory attempted such transplanting into the anterior chamber of the rabbit's eye, and found growth. He made a series of experiments and found that the three kinds of transfer give strikingly uniform results. He attempted to transfer to the anterior chamber of the eye normal adult tissue, normal embryonic, benign and precancerous, and cancer tissue. These were tried autologously (in the same animal), homologously (one animal to another of the same species), and heterologously (to an animal of a different species). He found that all four types of tissue will grow in autologous transfer, that is, to other sites of the same animal.

When transfer to the eye of homologous animals (same species), he secured growth of all but the benign and precancerous tissue, but when the transfer was made to the eye of heterologous animals (another species), only embryonic and cancerous tissue would grow. This poses many questions of the nature of cancer but offers a ready means of diagnosis. Extensive studies have confirmed the diagnostic value of this method of study. Many cases were shown in which microscopic study would fail to make a differentiation, but the animal transfer into the anterior chamber

of the eye would distinguish which tissue had established its own independence and power to grow, that is, which was malignant or cancerous. The term cancer includes sarcoma.

Grafts in rabbits' eyes or guinea pigs' eyes will take on the more characteristic form of growth; that is, a cancer which is undifferentiated, or has broken down and shows fibrous and dead cells along with the metastatic ones, will assume its more primary character after two weeks of growth in the eye, and often can be differentiated as to form or origin.

Stories and pictures were shown of metastatic growths which could only be proven by eye growth. Embryonic tissue also will grow in the pig's eye, but the diagnosis between embryonic tissue and cancer is not difficult. Embryonic tissue transferred to the anterior chamber will develop as nature intended, and show its character, as a specific organ or tissue, but the cancer will still be cancer.

Many hundreds of pictures were shown at this annual meeting illustrating the growth in the animal's eye. Among the slides of cancer, one in particular was evidently a secondary growth and was non-distinguishable as to origin. After two weeks of growth in the guinea pig's eye, it was very definitely a melanoma. Previous inquiry of the patient had disclosed no previous operation or removal of cancerous growth. But after this finding, the patient remembered having had a black mole removed two or three years previously. Another interesting feature of this research is that normal human tissue will not grow in the guinea pig's anterior chamber, so that when a specimen is transplanted and grows, that is evidence of malignancy. This has been proven in hundreds of cases.

An interesting sideline of this study is a confirmation of the "Ascheim-Zondek Test." The doctor transplanted a small piece of ovary in the anterior chamber of a male rabbit. The ovary, being taken from a rabbit and being from the same species of animals, grew. After six weeks time, when the growth was thoroughly established, the injection of urine from a pregnant woman produced ovulation in the transplanted ovary tissue within eight hours, and this could be watched by looking into the rabbit's eye. Urine from a non-pregnant woman did not react. In eight hours time a positive diagnosis was possible. After the rabbit's eye has had time to complete the ovulation process, the eye is again available for another test.

Sykes Lecture presented at the third annual Michigan Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 23, 1949.



# Importance of Preoperative Preparation of the Patient in Surgery of the Colon

By Laurence S. Fallis, M.D.

Detroit, Michigan

THE OPERATIVE mortality rate of colon surgery has undergone a striking reduction during the past twenty years. A comparison of recently published statistics with those of the second decade of this century reveals that the average operative mortality rate has been reduced from a high of 25 per cent or more to a low of 5 per cent or less. Operative mortality statistics collected from representative European and American clinics are listed in Table I. These figures show that improvement occurred as time went on; for example, the Mayo Clinic mortality figure published in 1937 is almost half that of the Johns Hopkins rate published in 1929. Nevertheless, it has been only in recent years that the mortality rate has decreased to the point that operation can be advised and urged with every confidence as to the outcome. Table II is a representative of present-day operative mortality figures, and is truly a remarkable record of achievement. Individual series of cases of carcinoma of the colon exceeding 100 operated upon without a death and large groups with a mortality below 5.0 per cent provide arresting evidence of surgical progress. There are many items to consider in attempting to explain this improvement, and undoubtedly each plays an important role. However, without discounting or minimizing in the least the value of the sulfonamides, the antibiotics, or the liberal use of blood transfusions, the greatest single contributing factor in my opinion has been that of deferring operation until the patient has been put in the best possible condition to withstand surgical intervention. Here, as in many other situations, timing is all important. Formerly patients were admitted to the hospital one day and operated upon the next, but it is now realized that it takes time to prepare patients for operation. Adequate cleansing of the bowel, restoration of blood and fluid levels, together with all-important studies of liver, kidney and cardiac functions, require a minimum period of preoperative preparation of from five to ten days. This may be summed up in another way by

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From the Department of General Surgery, Henry Ford Hospital, Detroit, Michigan.

TABLE I. PREVIOUS OPERATIVE MORTALITY

Hospital	Period	Percentage
Johns Hopkins	1889-1919	35.0
Peter Brent Brigham	1913-1931	30.5
Vienna	-1936	20.4
(Finsterer)		
Mayo Clinic	-1937	18.0
University of Edinburgh	-1934	14.8

TABLE II. PRESENT OPERATIVE MORTALITY

Hospital	Period	Percentage
Crile Clinic		
(Jones)	-1941	(1000) 7.2
	1941-1943	(137) 0.0
	1940-1947	(169) 0.0
Massachusetts General Hospital (Allen)	-1946	(105) 2.0
Mayo Clinic	1940-1947	— 5.0

stating that we are now practising the type of surgery that Moynihan so fervently urged when he said thirty years ago that "we have made surgery safe for the patient; let us now make the patient safe for surgery."

The question that comes naturally to the inquiring mind is: what has brought about this welcome improvement in operative results? As Jones of the Crile Clinic has pointed out, there are certain invariables. Patients still come to the surgeon late in the disease; colonic cancer is no less malignant than formerly; the anatomic arrangement of the colon is unaltered; fundamental physiologic and metabolic processes remain unmodified, and surgeons have not suddenly become supermen.

The factors responsible for this pronounced improvement in results are difficult to evaluate. It is easy and therefore tempting to dismiss the subject by attributing the change to the use of sulfonamides and antibiotics, but a consideration of Figure 1 indicates that the mortality rate had begun to decrease before 1939 when the sulfonamides were introduced. At the same time it must be agreed that the precipitous fall to the present level of below 5 per cent occurred coincidentally with the introduction of sulfonamides and antibiotics. The answer to the question must be then that a combination of factors has wrought the transformation. The credit is due almost entirely to those who have devoted so much time to surgical research, for out of the laboratory have come all the innovations that have contributed so much to surgery of the colon. It was not until the experimental surgeons studied the anatomy of the colon that the existence and importance of the marginal artery was emphasized. From the same source has come the exhortation to use fine needles and fine nonabsorbable sutures to make intestinal anastomoses safe and

secure. Another important contribution has been that of directing attention to the significance of restoring and maintaining disturbed physiologic and metabolic processes before operation. Specialized research in anesthetic, x-ray chemotherapy, bacteriology, et cetera, has added greatly to our knowledge and helped to solve many of the problems.

### General Remarks

The success of any colon operation is dependent on two factors: first, adequate preoperative preparation, and second, detailed knowledge of the blood supply of the colon, rectum and terminal ileum. Peritonitis is the great hazard of colon surgery. There is only slight chance of peritoneal infection following operations on the stomach and small intestine, but the risk increases in direct proportion to the distance from the stomach, hence, there is more danger from an operation on the terminal ileum than on the proximal jejunum, and when the colon is reached, the hazard increases tremendously. This risk of peritonitis, estimated at about 25 per cent prior to the introduction of the sulfonamides and antibiotics, led many surgeons to abandon primary resection and anastomoses in colon resections and to employ graded procedures. Succinyl sulfathiazole administered by mouth for four or five days preoperatively, and penicillin administered in adequate dosage before and after operation, have so reduced the incidence of post-operative peritonitis that one-stage resections of the large bowel are now being carried out in increasing numbers. Even with the operation separated into stages, there is still great danger from peritonitis, if the preoperative preparation has been incomplete. The wall of the colon is thinner than the small intestine, and is more easily traumatized; thus, mere handling of a colon laden with feces may injure the wall sufficiently to allow permeation by highly infective organisms. This damage increases in proportion to the amount of distention, for not only do the walls become thinner, but also the blood supply of the wall is diminished by the pressure of the contained gas. Elective operations, therefore, should never be performed upon the distended or loaded colon. Surgical intervention at this time should consist solely of measures which will produce decompression.

### Objectives in Preparation

The purpose of the preparation is to clear the colon of fecal material as far as possible in order to diminish the risk of peritonitis. All patients

should be so prepared that an open operation in the colon could be performed even though a closed operation is planned. If there is no obstruction, most patients can be made ready for operation in five to seven days.

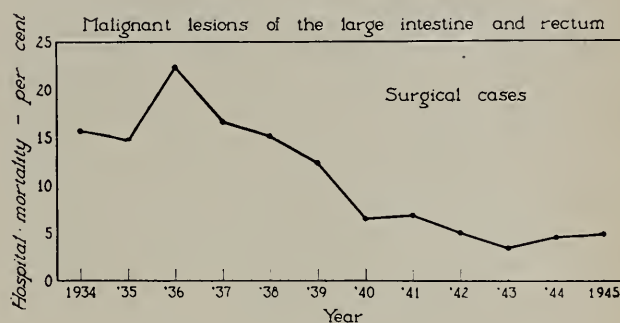


Fig. 1. Mortality among patients subjected to operation for malignant lesions of the large intestine and rectum, 1934-1945. (Reprinted by permission of *Surgery, Gynecology and Obstetrics*. From Peimberton, J. deJ.; Black, B. M., and Maino, C. R.: 82: 523-534, (Oct.) 1947.)

The objectives of preoperative preparation may be listed under five headings.

1. Evaluation
2. Decompression
3. Restoration
4. Measures to combat infection
5. Cleansing of the bowel

### Evaluation

A complete physical examination, with special functional studies of the heart, liver, kidneys and state of hydration, supplies information which enables the surgeon to select the most suitable anesthetic agent and to determine the type of operative procedure which would minimize the risk. For example, spinal anesthesia is contraindicated in patients with pronounced arteriosclerosis, and one-stage operations are contraindicated if blood and protein levels do not approximate normal.

### Decompression

Obstruction of the colon, even when almost complete, presents remarkably few signs and symptoms to the casual observer. The general condition of the patient usually remains good. Increasing constipation and distention are the outstanding features. Vomiting, a late symptom, stands in marked contrast to small bowel obstruction, where emesis occurs early and persists until the obstruction is relieved. When a patient is admitted to the hospital with partial obstruction of the colon, it is often possible to deflate the distended bowel by



means of the Miller-Abbott tube, rest in bed, application of hot stupes and repeated enemas. One should not overlook the obvious fact that enemas may give a satisfactory result even in complete obstruction, because the enema may remove bowel contents lying distal to the obstruction. If flatus comes away with the enema, obstruction is never complete, and it is likely to yield to conservative measures. Oil retention, milk and molasses and large saline enemas are the most useful. A diagnosis of complete obstruction should not be made until all these enemas have been given a fair trial, for the mortality following non-operative measures is much lower than when the obstruction has to be relieved by surgical intervention.

If, however, this regimen is ineffective, a so-called blind enterostomy must be done to decompress the bowel and get it into condition for subsequent surgery. This operation should be performed, if possible, under local anesthesia. No effort should be made to determine the site of the obstruction because abdominal exploration necessitates manipulation of distended intestine, a procedure that is fraught with grave danger of initiating a fatal peritonitis. The best method of decompression obviously is accomplished by transverse colostomy because by this means the fecal current is completely diverted. It is then possible to first cleanse and then attempt to sterilize the distal bowel and the obstructive lesion. The hepatic flexure or the proximal transverse colon is the ideal site for colostomy in obstruction of the distal colon. This segment can be exteriorized easily through a short transverse incision through the right rectus muscle and held in position by a glass rod. If, however, distention is pronounced, appendicostomy or cecostomy may be the only procedure that is feasible. Theoretically, appendicostomy is the safer procedure, but only rarely is it a feasible procedure.

Cecostomy is performed when the appendix is not readily located or it is difficult to free. The best method is to mobilize the cecum sufficiently to bring up a segment through the incision and hold it in place by means of a crushing clamp. A small Payr clamp is ideal. The peritoneum is then closed about the exteriorized bowel and the skin margin is packed with dry one-inch packing to promote adhesions between the skin and the intestine. The bowel should not be sutured to any structures of the abdominal wall because the cecal wall is very thin and is liable to be penetrated by

the suture needle. The clamp is partially removed in twenty-four hours and the cecum is opened through the crushed area to allow escape of gas and intestinal contents.

On some occasions when relief of obstruction is urgent, a tube cecostomy must be done, but this is a more dangerous procedure because it is almost impossible to accomplish without some soiling, and often there is escape of a great deal of intestinal contents. The advantages of this method are that the obstruction is relieved immediately, the escape of intestinal contents can be controlled and the opening in the bowel always closes spontaneously when the obstructing lesion is removed. Both appendicostomy and cecostomy are inferior to colostomy, for while decompression may be satisfactorily effected, it is never possible to diminish the infectivity of the distal colon since the fecal current is not completely diverted.

### Restoration

Building up the patient is accomplished by giving barbiturates to allay apprehension and to produce much-needed sleep and by administering blood proteins. Glucose, saline and vitamins C and K are given to restore and correct deficiencies.

### Measures to Combat Infection

The possibility of infection of the peritoneum at operation is lessened by adequate preparation of the colon. Fecal bulk is reduced by a high caloric low residue liquid diet and by the administration of succinyl sulfathiazole, 4 grams four times daily, during the four days preceding operation. Penicillin, 300,000 units three times daily, is commenced the day of operation and continued during the postoperative period until the danger of infection has passed.

### Cleansing the Bowel

The fecal bulk having been reduced by diet and sulfonamides, it remains only to clear the colon by means of purgatives and enemas. Castor oil and epsom salts should, of course, be given with caution, and on no account should patients be purged to the point of exhaustion. The secret of successful preparation is repeated flushing enemas given the evening before and the morning of operation. On the day preceding operation, water only is given by mouth, and intestinal activity is reduced by the administration of opium and belladonna.

## Outline of Routine Preoperative Preparations of Patients for Colon Surgery at the Henry Ford Hospital

### General Measures

1. High caloric, low residue, liquid diet.
2. Force sweetened, strained fruit juices by mouth.
3. Intravenous glucose when necessary to keep daily fluid intake at 3000 c.c.
4. Saline enema twice daily.
5. Phenobarbital, grains  $\frac{1}{2}$  three times daily.
6. Succinyl sulfathiazole, administered at the rate of 4 grams four times daily until the day of operation.
7. Blood transfusion when necessary to bring hemoglobin up to 60 per cent and plasma proteins to normal.
8. Dental prophylaxis.
9. Obtain necessary consultations as urological, cardio respiratory, metabolic, et cetera.
10. Arrange for relatives to donate blood; at least two transfusions will be necessary.

### Cleansing the Colon

The routine schedule calls for a four-day preparation with operation on the fifth day.

1. *First Day.*—Castor oil,  $\frac{1}{2}$  to 1 ounce, depending on the patient's condition, given not later than 4:00 p.m. so as not to interfere with the patient's rest at night.

2. *Second Day.*—In an 8-ounce bottle, put 2 ounces of saturated solution of  $MgSO_4$  and 6 ounces of water. Beginning at 8:00 a.m., give 1 ounce of this mixture hourly until the patient has received the eight doses. At 4:00 p.m. repeat the castor oil. Omit or reduce the dose in weak patients, or if there have been too many bowel movements.

3. *Third Day.*—Repeat  $MgSO_4$  as on second day unless contraindicated by patient's condition. Discontinue at any time if patient is becoming exhausted.

4. *Fourth Day.*—Complete rest except for saline enemas, only water by mouth. Give tincture of belladonna, 15 drops, and tincture of opium, 10 drops, every four hours for four doses. Introduce Miller-Abbott tube and check position by x-ray.

5. *Morning of Operation.*—Give a saline enema. Pass a duodenal tube through the nose and fasten it in place. When the tumor involves the rectum or rectosigmoid, tie in a urethral catheter. Administer penicillin, 300,000 units, and continue three times daily till danger of infection has passed.

### Summary and Conclusions

1. The mortality from surgery of the colon has undergone a remarkable reduction in the past decade.
2. Better preoperative preparation based on experimental evidence has brought about the improvement.
3. An outline of preoperative preparation for colon surgery is given.

## Political Socio-Economic Problems

By L. Howard Schriver, M.D.  
Cincinnati, Ohio

IN MAKING an exhaustive investigation of the political socio-economic problems currently confronting the medical profession, it is readily concluded that any and all such problems have significant implications to the profession.

The medical profession occupies such an important position in the general political, social, and economic life of the community that this premise seems to me to be incontrovertible. Unfortunately, the medical profession either does not subscribe to this position or is not interested. This voluntary isolation has resulted in reducing the medical profession's influence to an almost irreducible minimum, and I venture the opinion that it has prevented what might have been an intelligent and honorable approach to the solutions of some of the serious problems before the community today.

It is evident that space does not permit a consideration of all these problems; however, it does seem pertinent to mention those which, although having general implications, seem to me to have more or less direct medical interest and to which it is the civic duty of the profession to give very serious consideration.

I am going to list only four issues which I believe to be important. First: medical care of veterans—in relation to who should be entitled to medical care as a client of the Veterans Administration, and the facilities required for furnishing this medical care. Second: medical education—the need for additional educational facilities and changes in the medical curriculum to increase the number of competent physicians. Third: hospital and other facilities necessary for the proper care of the sick. Fourth: distribution of medical care—what method of distribution makes available adequate medical services to all people.

These four issues are, in my opinion, foremost among the important, fundamental, political socio-economic problems confronting the medical profession. The medical profession has the challenge of obligation to take leadership in the solution of these problems. Intelligent leadership may preserve freedom, and I do not confine that to the freedom of the medical profession. Negation and failure will undoubtedly result in serfdom.

Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 24, 1949.



# Care and Treatment of the Psychotic Patient

By O. R. Yoder, M.D.  
Ypsilanti, Michigan

EVERY PHYSICIAN, regardless of his special interest, will have patients during the course of his practice who show mental symptoms. These symptoms may be such that the patient, by reason of unsoundness of mind, is incapable of managing himself or others if permitted to be at large.

This paper is a discussion of the problem of the mentally ill. The mental health problem for many years has been first in the State of Michigan. The state hospitals have been sadly overcrowded and understaffed; patients must wait for admission, and it is with regret that more beds must be added at frequent intervals.

The State Legislature in 1877 passed an act creating a "Board of State Commissions for the supervision of charitable, penal, pauper and reformatory institutions." In 1877, after the completion of the Eastern State Hospital at Pontiac, another act was passed prohibiting the placing of any mentally ill person in a county almshouse.

The first institution for psychiatric research and education in America was founded at the University of Michigan in 1901. It was followed by the psychopathic ward opened in 1906 under the direction of Dr. Albert Barrett, who had the official title of Pathologist of State Hospitals. This was later reorganized as the State Psychopathic Hospital, which was to serve as a "state hospital especially equipped and administered for the care, observation and treatment of insanity and for persons who are afflicted with abnormal mental states but not insane."

The problem of state care has grown with the increase in population, until at present 307 persons per 100,000 are in institutions. Ten states of the union hospitalize 442 per 100,000.

The six mental hospitals are overcrowded by more than 20 per cent, or 2,500 beds. The immediate needs of the state are in excess of 3,200 beds, and to this total must be added the factor of annual gain, which is 450 beds per year for the years ahead.

Dr. Yoder is medical superintendent of the Ypsilanti State Hospital.

Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 24, 1949.

Larger and better state hospitals are not alone the solution of the problem. Some years ago administrators believed that the mentally ill should receive active treatment as well as humane care, and insane asylums then became hospitals. One wonders whether this change of name has achieved its purpose. In order to be a hospital, an institution must have and meet hospital standards.

Every state hospital today has two objectives:

The first is to treat acute mental illness by all the recognized and accepted forms of therapy. This includes the various forms of shock treatment, the highly specialized forms of neurosurgery and various forms of psychotherapy. Acute therapy is used in a general hospital for organic disease and the acutely ill. It is technical and expensive, and if the illness becomes chronic in the general hospital, the patient is sent to some nursing or convalescent home.

A state hospital has a second function—to provide treatment and housekeeping care to the chronically ill and infirm. It is difficult to fully correlate this function with the first. Here, re-education is an important part of the therapy, requiring a specialized staff of teachers in occupational and recreational therapy until the patient becomes re-integrated to living. This takes more time. Employment must be furnished for adjustable schizophrenics suitably to their level of conduct. A vigorous program of boarding-out care under the supervision of a social service worker must be instituted. Sixty to 70 per cent of state hospital patients need this type of therapy.

To correlate these two functions efficiently and economically in a state hospital is difficult. It does not solve the problem of mental health.

I wonder whether the general hospital has met its obligation to this problem. There are approximately 4,500 general hospitals in the United States, and only 127 accept and provide treatment for the mentally handicapped. It is in the general hospital that many emotional disorders most likely will appear; early attention to anxiety, fear and insomnia has great preventive possibilities for the future health of the patient. Psychiatry is a part of medicine—it is not a remote specialty—and I have observed a growing awareness that a psychiatric approach is useful in fully understanding surgical and medical problems.

I suggest that a psychiatrist become an integral member of each general hospital team, just as we have a surgeon and internist a member of our

state hospital team. This team must have an increasing relationship to the community. The sick come from this community, and to the community they must return. We, as physicians, must all recognize the influence of environment, social and economic forces on ill health.

We cannot ask the state to solve all of the problems of mental disorders. Primarily it is a community problem, for are not mental disorders just as much illness as any organic disease? It is a policy of the Veterans Administration to have a mental ward in each one of their general hospitals, and I predict that this will be found in the general hospital in the future. There is an increasing need for this service. We have doubled the years of expectancy of human life. Every community has many more old people than they had sixty years ago. These are especially susceptible to mental illness; hence the latter is increasing.

We are living in restricted quarters; our social freedom is limited; therefore, when one in a family develops a mental illness, it is very important that he be removed from his home. To go to a state hospital requires legal approval. This takes time, and many families are reluctant to take this step, so he is kept at home and the prospect of help becomes less. All are willing to take him to a general hospital, and if he does not respond to treatment, it is much easier to accept advice to transfer him to a mental institution from that place.

It is regrettable to see a patient committed to a state hospital, be admitted, recover in a few weeks and go home, when he could have been treated elsewhere. There are those cases of excitement or depression or confusion where only a few days or weeks of hospitalization are sufficient to restore the equilibrium.

The complaint from the management of the general hospital is that the patient is restless, and may disturb the other patients. It is no reproach to a physician who orders sedatives, but noise from a children's or obstetrical ward is tolerated and accepted, and one cannot understand why a little disturbance from a psychiatric ward could not receive the same sympathetic understanding.

Therefore, it will aid in the problem of the mentally ill and will be a step forward in scientific care of psychotic patients if each general hospital will have a psychiatric ward. It is true that these cases are in the minority, but in the course of

time the number of short psychoses is considerable.

The community determines the standards with which the mentally ill are treated; therefore, it is highly important that the standards of community health be kept high, with the elimination of those factors which produce personality disorders.

The record shows that out-patient psychiatric clinics decrease the number of patients requiring a hospital bed. These clinics must be emphasized in the future, united with the efforts of physicians treating patients in their private offices.

Inadequate and immature individuals do not respond well to hospitalization; they only retreat farther from their responsibility of living. Cases of character neurosis are much more susceptible to treatment in a clinic than in a hospital. Michigan has established child guidance clinics rendering practical service in the matters of school failures and behavior problems. Clinics should become the center of public education, and with the approval and co-operation of the local medical society they will form a well-grounded medical approach to psychiatric problems. In fact, it is our hope that the center of psychiatric interest will be in the local communities and not in a state hospital.

The treatment of a major psychosis must always be based upon accepted scientific forms of therapy. Premature announcement of some new form of treatment, especially in the public press, is eagerly accepted by anxious relatives; newspaper articles are studied with increasing hope, and if this form of therapy fails or is not used, confidence in scientific men is lost.

Psychiatry is a relatively new specialty. Because of its popular interest I have been impressed with the fact that too much is expected. It is a common slogan: "See a psychiatrist." Psychiatrists are not miracle men. Much research is needed. The knowledge gained through sound investigation, as is now sponsored by the Scottish Rite, Northern Masonic Jurisdiction, in schizophrenia, is stimulating.

It has been estimated that about 60 per cent of the patients coming to a general practitioner have some psychological problem which contributed to the start of the illness or retards recovery. Every physician must include in his examination, diagnosis and treatment an understanding of his patient.

The term "psychosomatic medicine" is used to denote a comprehensive view of the patient. Research in this field of comprehensive medicine is



making marked progress, especially in such projects as chronic arthritis, peptic ulcer and hypertension. Psychiatric treatment is in need of much more scientific research.

It is the purpose of this paper to call attention to the problem of care and treatment of the mentally ill. For the state to build bigger and better hospitals is not enough. If these hospitals are inadequately staffed, proper therapy cannot be applied, and this only multiplies the number of those who will not be cured and who will remain in an institution for the remainder of their lives.

It is our hope that the day will come when state hospitals will be on a parity with general hospitals, when they will be regarded as integral parts of a social community and their patients will receive the same individualized treatment and care as for any illness. This will come when thinking men and women fully realize the fact that we are our brother's keeper.

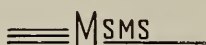
### Conclusion

1. Michigan needs 3,200 hospital beds to eliminate overcrowding and to house those patients in private institutions; 450 beds must be added each year to meet the needs of increasing population.

2. Each general hospital should offer psychiatric service to its community; this will decrease the number of commitments.

3. Child guidance and out-patient clinics are important agencies in the solution of this problem.

4. State hospitals and standards of care and treatment are only as good as we demand that they be. We get what we pay for. We, as scientific men, cannot afford to be indifferent to this problem.



Cancer never develops in healthy tissue.

\* \* \*

The microscope in the hands of a competent physician is the court of last resort in the diagnosis of cancer.

\* \* \*

Eighty per cent of cancer of the uterus can be diagnosed without a surgical operation beyond a biopsy.

\* \* \*

Not more than ten to fifteen per cent of single painless lumps in the breast are cancer, but microscopic examination is necessary to decide.

\* \* \*

Time is the most important factor in the control of cancer. Do not delay your diagnosis.

## THE PRACTICAL USES OF PHYSICAL MEDICINE

(Continued from Page 1160)

physical medicine for relief of human suffering. If all of us can strengthen our ethics to keep pace with our physics, if our education, tolerance and understanding can keep up with our capacity to destroy, if we can advance our social engineering to keep abreast of our electrical engineering, we may yet make this precarious age of physics the greatest of all ages. The new developments in physical medicine are contributing toward this end.

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## The Front Line in Rheumatic Fever Control

Rapid progress has been made by the Michigan State Medical Society in launching the present aggressive Rheumatic Fever Control Program. With the first-of-the-year appointment of Leon DeVel, M.D., as coordinator for integration and standardization of the thirty Rheumatic Fever Diagnostic Centers, the program obtained a competent full-time administrator. A considerably increased volume of educational material is already in circulation among Michigan medical circles and publications. Every co-operation is being afforded the Michigan Department of Health in the expansion of its educational literature and facilities on the subject. This number of *THE JOURNAL*, publishing papers originally presented during the 1949 "Heart and Rheumatic Fever Day," represents one aspect of these efforts.

But the program cannot be fully successful until every practitioner of medicine is thoroughly acquainted with facilities for the care of his patient offered through the Diagnostic and Consultation Center in his area. In rheumatic fever, as in so many medical problems, the front line is the general practitioner rather than the specializing consultant. But the difficulty in diagnosing and determining the activity status of rheumatic fever and rheumatic heart disease, inherent in the absence of specific clinical tests, and the resultant time-consuming study required make it imperative that each general practitioner employ every available aid. This is one of the prime objectives of the educational phases of the program.

The clinical phases of the program are properly in the hands of local committees, and in a sense are of least concern, since they are grounded in the high standards of Michigan medical practice today. But such Centers cannot function without case referrals, and it must be the responsibility of each County Society's membership to insure the appointment of active and interested personnel to these committees and to encourage extensive use of the facilities they provide. Each local Society can also assist by increased use of the available educational material and round-table discussions on rheumatic fever in their scientific programs. Every general practitioner must be made rheumatic fever conscious and encouraged to seek the assistance of a Center in troublesome cases.

*W.E. Barstow M.D.*

President, Michigan State Medical Society

*President's*



*Page*



# Postgraduate Continuation Courses

## WAYNE UNIVERSITY COLLEGE OF MEDICINE

September 12-December 3, 1949

These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the GI Bill, should make arrangements for tuition and books, as provided by the GI Bill, by presenting these Certificates of Eligibility to Mr. Arthur Johnson, Veteran's Administrator at Wayne University, 5001 Second.

If you do not possess a Certificate of Eligibility, please call Mr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers it is necessary to bring with you. *This must be completed before you register.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine *before September 10.*

Title of Course	Place	Time	Fee
<b>PATHOLOGY</b>			
Surgical Pathology	College of Medicine	Wednesday 1:00-5:00	\$50.00
<b>PHYSIOLOGY AND PHARMACOLOGY</b>			
Survey of Pharmacology	College of Medicine	Tuesday 4:00-5:00	\$15.00
<b>PHYSIOLOGICAL CHEMISTRY</b>			
Physiological Chemistry Seminar	College of Medicine	Wednesday 4:00-5:00	\$15.00
Biological Catalysts	College of Medicine	Friday 1:00-2:00	\$15.00
<b>DERMATOLOGY</b>			
Seminar in Dermatology	Receiving Hospital	Wednesday 10:00-11:30	\$15.00
Seminar in Dermopathology	College of Medicine	Tuesday 11:00-12:00	\$15.00
Conference on Venereal Diseases	Social Hygiene Clinic	Thursday 4:00-5:30	\$15.00
<b>INTERNAL MEDICINE</b>			
Medical Seminar	Receiving Hospital	Thursday 6:30-7:30	\$15.00
Medical Conference	Receiving Hospital	Saturday 10:30-12:00	\$15.00
Gastroenterology	Receiving Hospital (Limit 10)	Saturday 8:00-9:00	\$15.00
Medical X-Ray Conference	Receiving Hospital (Limit 10)	Tuesday 11:00-12:00	\$15.00
Electrocardiography	College of Medicine	Thursday 4:30-5:30	\$15.00
Allergy Clinic	Receiving Hospital (Limit 8)	Tuesday 8:00-11:00	\$25.00
<b>SURGERY</b>			
Seminar in Surgery	College of Medicine (Limit 20)	1 hour per week	\$15.00
(Day and time to be arranged)			

# Editorial

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## BE ON GUARD

WE HAVE experienced three new approaches to the Federal control of medicine; three Federal programs unfavorable to the medical profession; three attempts to invade private enterprise and to advance State Socialism. The first was the proposed extension of the Federal Social Security to include all self-employed persons. It required active and persistent effort and pressure from every angle. The committee working on this program has decided to eliminate the medical profession when writing the new bill. Rural people, wanting none of these proposed old age benefits, had been active long before we were, and had been eliminated. The plan was to assess each self-employed person the Social Security rate of from 2 per cent to 3 per cent or more and make them eligible for old age retirement benefits, which most of us would never be able to enjoy. The particular danger is now apparently past.

The second is the president's Reorganization Plan No. 1, which is an outgrowth of the Hoover Commission Task Force Report in which a separate Department of Health was recommended. Congress authorized the President to make Executive Department changes. The first one proposed was to elevate the Federal Security Administrator to Cabinet rank, and include in this department all medical and health administrations, in direct contradiction to the very specific recommendation of the Hoover Commission, thus giving Oscar Ewing much more opportunity to carry out his compulsory health program, which is the socialism of medicine.

As this is written, Congress has just held hearings on this Reorganization Plan. Senators Taft and Fulbright introduced a Resolution (No. 147) which would reject this plan. The Committee on Expenditures voted in favor of the resolution. Under the law, if one house of Congress rejects the President's plan it will not become effective. Otherwise, it is established by Executive Order.

The medical profession had begun to feel that the Wagner-Murray-Dingell threat was temporarily asleep, but the announcement recently was made that this program of compulsory health insurance will be a part of the next Congressional

campaign. Five states will be the focal point, receiving the benefit of all of the power of Government in carrying out this program. If Mr. Ewing and his department are raised to Cabinet rank, his influence on the coming election may be tremendous. Congressman Harness reported that the department spent 75 million dollars in propaganda for socialized medicine in 1947. What will they spend in 1950?

The third approach is the National School Aid Program, which was temporarily halted by Cardinal Spellman and his controversy with Mrs. Roosevelt. The program carries with it medical aid to school children with no reference to their ability to pay. Under this scheme the government takes over the health services of all school children, and advances socialized medicine by many millions of persons. Cardinal Spellman's blast which delayed the enactment of the act was that he asked the same auxiliary benefits (other than religious) for private school children as planned for other schools. He thought health benefits, transportation to school and generally supplied textbooks should be made available to all school children, if the Government makes them available to any. We object to the "free" health benefits, because that is definitely political medicine.

## WHAT OF THE FUTURE?

IF PROFESSIONAL men—medicine, dentistry, law, architecture—wish to protect their own interests, they must always be on the alert. They must propose programs much more often than they oppose them. Very soon our Congressmen will be home for a vacation. Every member of our profession ought to interview his Congressman and express his views.

An item which we might well consider: The so-called "learned professions" are very peculiarly situated. Men in these professions, in large numbers, have become sufficiently productive to earn fair incomes during a very short period of their lives. By age thirty-five they are well established. At best they enjoy fifteen or twenty active years, after which their productive period declines.



Our income tax laws are so arranged now that these men have to pay high bracket income taxes on their incomes, thus preventing the accumulation of adequate reserves. In later years, when of necessity they must do less work and have smaller incomes, many of them have financial difficulties because of higher level of living.

There is a provision in the income tax law by which certain organizations, instead of paying their responsible executives high salaries, may invest part of their salary in approved types of annuity insurance. The amount used to purchase this insurance is not taxable at the time earned. But the returns from the insurance are taxable as they are received.

Income tax laws now provide for especial treatment of long term "capital gains." If an investment has been over six months, and makes a profit when sold, this is divided in half, and the maximum tax is fixed at 25 per cent. This provision could be extended to approved annuity insurance. In this way, a man could build up an income estate for his aging years, which he cannot do now when he is paying the high income bracket taxes.

Why not request your Congressman to provide, in the tax laws, a method by which self-employed persons, who of necessity have only a few years of relatively high income life, may have the same advantage that executive employees in industry now have?

## AGENDA

THE FOLLOWING group of editorials express so thoroughly and explicitly a problem of the whole medical profession that we are republishing them entirely. They appeared in the *Detroit Medical News* and are from the pen of William Bromme, M.D.

### Agenda—1

When the doctors of Michigan established a voluntary prepayment plan to meet the problem of providing professional service for a specific low-income group, they committed themselves to giving what they promised to this group.

Early, the plan overstepped the established income level when it wrote policies for entire organizations: and the amount of confusion that resulted from this continues today—so that there is uncertainty as to what income limits are valid and when a patient may reasonably be expected to pay a professional fee over and above the plan's schedule.

As the plan expanded, three things happened.

First, there was a gradual rise in income for the group for whom the plan was originally designed from around \$2500 to over \$4000. The income level stipulated by the plan has not taken this into account. Second, the premium rates have not risen appreciably and the schedule of payments for professional services has remained generally at the 1942 level except in a few items. The third element has been the increasing recognition that prepayment systems can and do work without government control, and are capable of great expansion.

When one comes onto the fact that about 40 per cent of the subscribers to the plan are being billed for professional service over and above the fees paid by the plan, or that thirteen in fourteen subscribers undergoing a surgical procedure for which the established fee is \$100 or more will be billed for an additional fee by the doctor, it becomes apparent that a prompt resurvey of *income limits and professional fees* must be carried out so that what is Medicine's effective answer to the threat of governmental medicine may be carried further to the millions who recognize the good in voluntary prepayment plans and want their benefits.

### Agenda—2

Prepayment plans for providing medical care are essentially a contractual relationship between consumer and provider. It must be pointed out again that there is serious danger in two aspects of this. One is the risk of freezing the income limitations at a level which will shortly become inconsistent with actual income. The other is the risk of freezing the fee schedule for professional service at a point which is incompatible with the going fee for comparable service—and thus open to question the validity of the program because of the inevitable levying of additional fees by the practitioner dispensing the professional care.

I have no idea how valid the thesis is today, but about a year ago many of us were impressed by the notion, subsequently carried into a contract between industry and labor, that wages could be pegged to increments or falls in the cost of living and that real wages would rise or fall in a manner paralleling this statistical yardstick. One of the widespread misunderstandings about our own voluntary prepayment medical program has involved the fact that income limits established arbitrarily were quickly outmoded by the times and that the fee schedule for services rendered under the plan was likewise frozen at a level which quickly became a fringe payment for a fringe benefit without correlation with the economics of the times or the actual value of the service rendered. This program, it must be remembered, was not one of assistance to a governmental agency (which we would be subsidizing reconditely through taxation) or to the indigent.

Accordingly, the surveys which tend to show that up to 42 per cent of the participants in the plan received billings for additional professional fees by the practitioner providing the professional care simply point up the fact that fee schedule and income limitation must be flexible and in relation to the general economic picture of the area served.

### Agenda—3

When the problem of income limitation and fee schedule have been defined, and the agreement is understood as a contractual relationship, there arises the question if the plan for prepayment of medical care shall be designed to create a profit or, instead, if surpluses accruing from its operation should be used to expand the plan and extend its benefits.

It would be difficult to justify an organizational profit in the providing of medical care although it must be said that considerable medical care is currently purchasable through agencies whose relation is not completely altruistic. It would be of interest to see what would happen to such current programs which provide partial indemnification if there were no need for them to provide profit for their shareholders. It would likewise be of interest to compare the actual benefits provided per unit of consumer's premium against the benefits afforded by the non-profit programs.

But this is of a kind with governmental proposals to undertake widespread medical care for a segment of the tax dollar—and a newly created segment, at that. For what would become profit to the private company would become extra payroll for a governmental agency—and in either instance a sizeable percentage of the payment made by the subscriber could never return to him in the form of medical benefit which he desired to obtain.

Consequently, the agenda must clarify the position of whether there is to be organizational profit or not in the providing of medical care on the wide scale.

### Agenda—4

How much medical care is to be provided under a prepayment plan? Shall it be complete coverage as the British system aspires to provide? Shall it be complete as the current governmental proposal promises? Shall it be complete and full as the text of labor's bargaining position demands?

I do not believe we have any statistical information to prove the point that full coverage is needed. One cannot accept the statistics from the British labor government without recalling the fiscal state of that government. One cannot accept the estimates of Mr. Ewing's organization particularly as expressed in the so-called Ewing Report since the figures are manipulated to match a philosophy, the truth to the contrary: the only valid conclusion is that there is wide variation in accessibility to medical care. One might be able to draw

a conclusion from the current Kaiser-Frazer, U.A.W.-CIO, Blue Cross, Blue Shield experience, in which the union welfare funds have been used to indemnify the local member against medical costs not covered through Blue Cross-Blue Shield. And if it can be shown that insecurity has stemmed from the costs of medical care beyond the coverage of the insuring system, it must be concluded that for an automobile worker in a given locale the coverage should be broadened.

The broadest coverage anywhere will not compensate for lack of facilities, and these do not arise overnight through the signing of a legislative act. There is, incidentally, no limit to the coverage possible through Blue Cross-Blue Shield.

Somewhere, through the entire structure of these proposals for widened coverage there recurs the question of why the elementary problem of medical care must be diverted from the individual to the state, the employer or the consumer organization.

WILLIAM BROMME

## NEW TRENDS IN THE TREATMENT OF ALLERGIC DISEASES

(Continued from Page 1143)

constituent from inhaled and ingested antigens, a contact factor, and secondary infection. Treatment is so difficult because it must be directed simultaneously towards control of all three elements of this disease.

In contact dermatitis, I believe the detection of causes has been aided considerably by a new classification developed by myself and Shea, based on patterns of the lesions. This classification often leads to the causative diagnosis and thus to the establishment of a cure.

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# The Michigan Rheumatic Fever Control Program

The Michigan Rheumatic Fever Control Program had its beginnings in April, 1945, at a meeting of the MSMS Preventive Medicine Committee which recommended to The Council that a project for the control of the disease in Michigan be undertaken. The Council approved the recommendation and a Rheumatic Fever Control Committee was appointed by the President of the Michigan State Medical Society. Co-operating agencies which co-operate financially and otherwise are the Michigan Heart Association, the Michigan Society for Crippled Children and Adults and the Michigan Crippled Children Commission.

One of the first actions of the Rheumatic Fever Control Committee was to formulate the principle that this program be primarily and fundamentally educational; that it should concern itself first with the dissemination of our present knowledge and management of rheumatic fever and of rheumatic heart disease among the physicians of this State. The need for more knowledge is shown by the fact that, paradoxically, a number of rheumatics go unrecognized—as shown by Selective Service and Army and Navy statistical data and at the same time the disease is being over-diagnosed with resultant psychic trauma. The protean nature of rheumatic fever, the lack of understanding of its true etiology, the insidiousness of its progress, the complications of its management, all contribute to make it a real problem.

Educational features for the physician are: scientific publications in *THE JOURNAL MSMS* and in the County Medical Society Bulletins; special scientific sessions such as the Heart and Rheumatic Fever Day held annually in connection with the Michigan Postgraduate Clinical Institute with essayists of national renown; local rheumatic fever programs under the auspices of the county medical societies and hospital staffs; the Rheumatic Fever Diagnostic and Consultation Centers.

## How the Rheumatic Fever and Consultation Centers Work

The Rheumatic Fever Diagnostic and Consultation Centers are the feature activity of the program; their statewide distribution makes their services available to all physicians. *The Rheumatic Fever Center does not treat patients; its services are diagnostic and consultative only.* Its primary concern is to help the doctor arrive at a definite diagnosis and to offer suggestions for treatment and management if these are desired. The referring physician receives the report of the Center's findings and recommendations but remains in sole command and carries the responsibility of management. *The patient remains his patient.*

In consideration of the fact that the physicians who work in the Center volunteer their time and skill, it behooves the referring physician to choose his patients for referral with discretion; first, there should be reasonable suspicion of rheumatic fever or rheumatic heart disease, or a problem in management for which he seeks aid; second, referrals should be limited to those families upon whom comparable diagnostic studies in his colleagues' offices might inflict undue financial hardship. *Admission to a Rheumatic Fever Center is by referral from a physician only.*

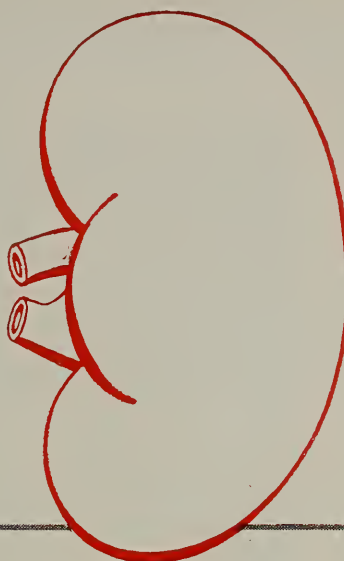
## Another "First"

The Michigan Rheumatic Fever Control Program is another "first" in a long list of "firsts" for which Michigan Medicine is nationally known. Every member of the Michigan State Medical Society should feel individually responsible for its success, either through active participation in the operation of the Centers or through continued support in using the diagnostic and consultation services which they offer.

The Michigan Rheumatic Fever Control Program is for the use of the Doctor of Medicine and for the benefit of his patients.

## To increase sodium excretion

"Thus it becomes apparent that Aminophyllin is a diuretic agent in that it can mobilize and excrete fluid and sodium even in the face of decreased intake."<sup>1</sup>



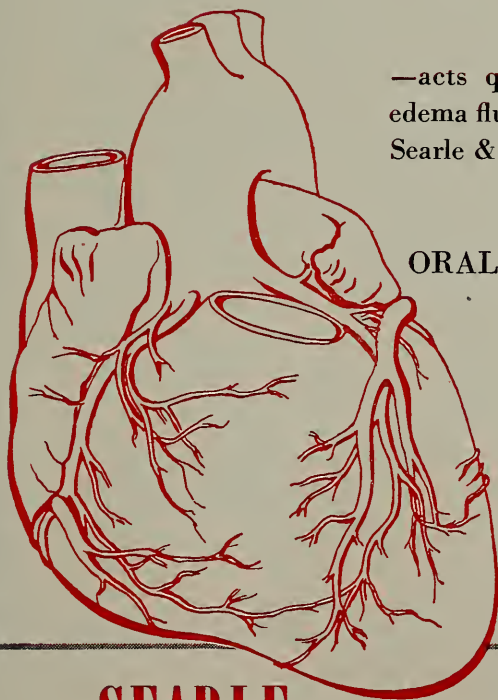
# SEARLE

# AMINOPHYLLIN\*

—acts quickly and efficiently to eliminate edema fluids in congestive heart failure. G. D. Searle & Co., Chicago 80, Illinois.

ORAL—PARENTERAL—RECTAL  
DOSAGE FORMS

\*Searle Aminophyllin contains at least 80% of anhydrous theophylline.



# SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

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# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## CAUSES OF DEATH

Only two communicable diseases, pneumonia and tuberculosis, remain among the ten leading causes of death in Michigan during 1948, and of these, tuberculosis has moved down from eighth to ninth place, exchanging with diabetes. Pneumonia remained in sixth place. Vital statistics for the year indicate that less than 10 per cent of the 56,520 deaths in the state were due to acute communicable diseases.

Heart disease continued to lead all other causes of death. There were about two and a quarter times as many deaths from heart disease as from cancer, the next cause of death.

Cancer, including leukemia and aleukemia, caused 8,261 deaths in 1948 in comparison with 8,100 in 1947.

Apoplexy was in third place causing 5,170 deaths in 1948 in comparison with 5,293 in 1947.

Accidents remained in fourth place, but deaths due to accidents increased from 3,848 in 1947 to 4,017 in 1948.

Other major causes of death in their order were: Nephritis, pneumonia, premature births, diabetes, tuberculosis and arteriosclerosis.

A comparison of the ten major causes of death for the past three years follows:

TEN LEADING CAUSES  
(In order of 1948 incidence)

	1948	1947	1946
Heart Disease .....	18,726	18,412	17,691
Cancer (includes Leukemias and Aleukemias) .....	8,261	8,110	7,749
Apoplexy .....	5,170	5,293	5,090
Accidents .....	4,017	3,848	3,776
Nephritis .....	2,473	2,567	2,530
Pneumonia .....	1,853	2,089	1,891
Premature Births .....	1,820	1,953	1,735
Diabetes .....	1,771	1,618	1,530
Tuberculosis .....	1,561	1,643	1,843
Arteriosclerosis .....	1,085	1,031	933

## HEALTH FILMS

Four new films of interest to the medical profession have been added to the film loan library of the Michigan Department of Health. They deal with cancer, nursing recruitment, child psychology and the adjustment of the new baby in the home.

*A Question in Time* is a new 20-minute sound film produced by the American Cancer Society, which asks and answers in clear simple terms those questions about cancer which are most commonly addressed to doctor-speakers by lay audiences. It should prove invaluable where it is impossible to provide a doctor-speaker for such a group. The film demonstrates dramatically how fear can be dispelled with proper knowledge. It is intended primarily for adult groups.

*Girls in White* is a new 16 mm. 20-minute sound film, produced by RKO-Pathé in its documentary series, "This is America." It is especially of value in recruiting nurses. The film accurately portrays life in a hospital school of

nursing, and the opportunities afforded in a nursing career. Both nursing and hospital groups advised in the production of the picture. The film is licensed for showing by recruitment groups, schools of nursing, nursing organizations and other educational institutions.

*Let Your Child Help You* is an 11-minute sound film, with content and narration by Dr. Alice V. Keliher, noted specialist in child psychology. It shows how very young children may help at home and thus achieve a sense of accomplishment and responsibility as well as increase of skill. It is recommended for child study groups.

*Martha Belongs*, 10-minute, sound, color film produced by the University of Wisconsin, deals with the adjustment of the new baby in the home, giving tips for bathing, feeding, dressing and the adjustment of other children to the new baby. It develops the newer theories of self-demand feeding and the giving of attention when needed. It is suitable for showing to homemaking classes, expectant mothers and parents.

The Film Loan Library of the Department has films, film strips and slides on 150 different health subjects for all age levels which may be borrowed for showing to community service, school and professional groups.

A catalog containing descriptions of the films and the age levels and groups for which they are suitable can be had without cost by writing to the Michigan Department of Health, Lansing 4, Michigan.

## BLOOD PLASMA RESEARCH

For a study to develop new methods and evaluate old methods of fractionation of blood plasma, Michigan Department of Health has received an American Red Cross grant of \$32,278.

The laboratories which are among the most advanced in the country in blood fractionation will attempt to find methods to recover the albumin and globulin from outdated plasma and to extend the period of usefulness of these particular components. They will also endeavor to find other ways of extending the benefits of each unit of collected blood to more persons.

The present grant will cover research involving the work of five scientists and four other employees for one year. It is the first of a series of grants expected to total about \$80,000 for fractionation studies, the results of which will be made available to blood fractionation centers of the entire country.

## BLOOD PLASMA IN UPPER PENINSULA

To make free blood plasma available wherever it is needed in Michigan's upper peninsula, the Michigan Department of Health in co-operation with the American Red Cross is conducting a concentrated 15-county blood procurement campaign in that area.

Procurement centers are being set up in 18 cities in the  
(Continued on Page 1178)

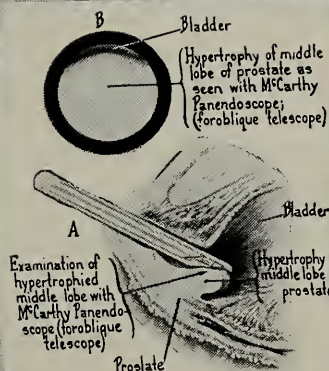


## MCCARTHY FOROBLIQUE PAN-ENDOSCOPE

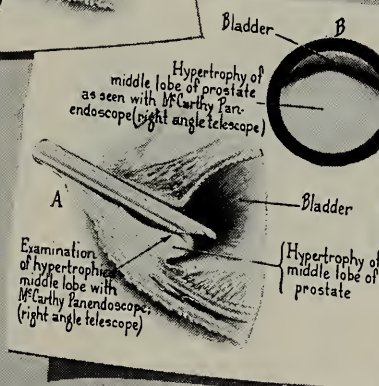
This appropriately named cystoscope possesses such broad utility that it has become one of the most widely used instruments in urology.

Essentially the armamentarium consists of straight sheaths, a foroblique telescope and a bridge assembly for relating these elements. Sheaths are available in sizes 16 to 30 Fr. The telescope is the well-known McCarthy Foroblique System noted for its natural, "amphitheatre", visual characteristics. Supplementary retrograde and right angle examining telescopes are also available for detailed inspection of all parts of the bladder and prostatic orifice.

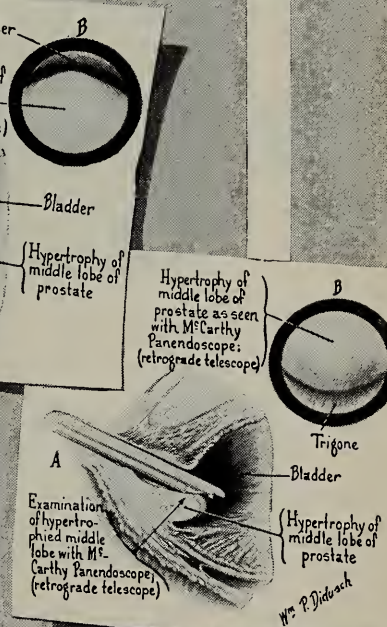
“Foroblique” is our registered trade mark to designate our obliquely forward visual telescopic system.



The illustrations are part of a series, admirably executed by Mr. William P. Didusch, showing the technique of the Pan-endoscope. The entire series and a complete description of the instrument and its accessories will be furnished upon request.



The sectional views above, and at right, show clearly the possibilities of accurately interpreting the extent of prostatic hypertrophy and its relation to the vesical orifice.



*“For Finer Equipment”*

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PHYSICIANS AND HOSPITAL SUPPLIES

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## "CRAMPS IN THE LEGS"



When the signs point to peripheral vascular disease, collateral circulation may be increased by use of a Burdick Rhythmic Constrictor.

The Rhythmic Constrictor is easy to use and quiet; it may be employed while the patient sleeps. Its effectiveness is demonstrated by symptomatic relief and objective benefit, such as increased oscillometric readings.



Recent clinical reports have emphasized the value of this form of therapy in peripheral vascular disease. Use the coupon for an authoritative abstract on the subject.

Gentlemen: Send me report of a recent clinical investigation on Rhythmic Constriction.

Dr. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

### THE G. A. INGRAM COMPANY

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## BLOOD PLASMA IN UPPER PENINSULA

(Continued from Page 1076)

Upper Peninsula during August and September. Blood given in these centers will be fractionated in the Michigan Department of Health Laboratories and returned to the communities for free use in case of emergencies requiring plasma or other blood products.

Procurement centers were scheduled for Chippewa, Luce, Alger, Marquette, Menominee, Dickinson, Iron, Gogebic, Ontonagon, Houghton, Keweenaw, Baraga, Delta, Schoolcraft and Mackinac counties during August and September.

The Upper Peninsula campaign is a part of the statewide continuing free blood plasma program being carried on by the Michigan Department of Health with the co-operation of the American Red Cross.

## MICHIGAN'S DIVORCE RATE LOWER

Michigan's divorce rate has been cut in half in the past two years, the Michigan Department of Health announced today. The marriage rate has declined a fourth in the same period.

Both divorces and marriages are continuing the downward trend which followed the war-created 1946 peak. Still Michigan's average of one divorce for every 3.9 marriages exceeds the national average of one divorce for every 4.4 marriages.

Records in the Statistical Section of the Michigan Department of Health show that while 10 people in every thousand in Michigan got divorces in 1946, 5 in every thousand got divorces in 1948 and that while 28 in every thousand undertook marriage in 1946, 20 in every thousand undertook marriage in 1948.

Marriages declined from an all time peak of 78,808 in 1946 to 61,986 in 1948. Divorces declined from a peak 29,158 in 1946 to 16,017 in 1948. Actual rate of persons married per one thousand estimated population in 1946 was 27.6 and in 1948 it was 20. Actual rate of persons divorced per one thousand estimated population in 1946 was 10.2 and in 1948 it was 5.2.

## VENEREAL DISEASE

To lead every Michigan person who may have been exposed to venereal disease to suspect infection and to go to his physician for examination and treatment is a major goal of a summer venereal disease education campaign undertaken in the state.

Comic books, fair midway shows, true confession type magazines, leaflets, motion pictures, radio, pamphlets, newspapers, and word of mouth are the educational media being used to direct attention to the state's No. 1 communicable disease problem.

The Michigan Department of Health aided local health departments in organizing local educational campaigns, meetings and publicity to coincide with similar effort throughout the nation.

Other goals of the current educational campaign, which is aimed at reducing venereal disease from first place among communicable diseases in Michigan, are: to in-

(Continued on Page 1180)

# BROMURAL

Council Accepted

BROMURAL

*the non-barbiturate sedative*

prescribe Bromural for daytime sedation, one tablet every three to five hours. For sleep, 2 or 3 tablets upon retiring or when wakeful during the night.

BROMURAL, brand of Bromisovalum, monobromisovalerylurea, is available as 5-grain tablets and in powder form.

*Bilhuber-Knoll Corp.*  
ORANGE, NEW JERSEY



DRINK  
*Coca-Cola*  
TRADE MARK REG.

You trust  
its quality



# SABEL'S CLUB FOOT SHOE

FOR  
INFANTS, CHILDREN,  
MISSES, YOUTHS AND BIG BOYS



RIGHT

LEFT

Dotted line on cut shows outline of normal shoe. Shoe cut shows abnormal outward swing of Sabel's Club Foot Shoe.

Sabel's Club Foot Shoes are for use after the doctor has over-corrected the position of the club foot. The outward swing of this shoe braced by the long outside counter will tend to keep the position the doctor desires.

Sabel's Surgical Shoes are carried in pattern and leather matching the Club Foot Shoes so that where required, even in split sizes, they can be fitted to the other foot.

*The Sabel Line, includes, in addition to the Club Foot, the Pre-walker, Brace, Pigeontoe and Surgical Shoes*

## Stuart J. Rackham Co.

**CORRECT SHOES FOR MEN AND WOMEN**  
2040 PARK AVE. DETROIT 26, MICH.

Opposite Women's City Club

Stuart J. Rackham  
President

Clyde K. Taylor  
Manager

WOODWARD 1-3820

## VENEREAL DISEASE

(Continued from Page 1178)

fluence human behavior to the extent that persons will avoid contracting a venereal disease; and to stimulate community action to abolish conditions in the community which might lead to promiscuity.

\* \* \*

The 29th Annual Michigan Public Health Conference will be held in Detroit, November 9 to 11, 1949, with headquarters at the Hotel Statler.

\* \* \*

Alexander M. Campbell, M.D., obstetrical consultant with the Section of Maternal and Child Health retired August 1, after more than 10 years of service with the Department climaxing a distinguished career in private practice and public health.

\* \* \*

Max Stebbins and Serge Lensen, Ph.D., of the Section of Virology of the Department are authors of an article on "The Golden Hamster as an Experimental Animal for Poliomyelitis Research" in the June issue of Proceedings of the Society for Experimental Biology and Medicine.

\* \* \*

Visitors from China, Siam, and Honolulu studied in the Department during July. They included: Dr. H. C. Tien, professor and dean of public health of Kweichow, China; Dr. Richard K. C. Lee, M.D., D.P.H., Assistant Health Executive, Board of Health, Honolulu, and Dr. Kammuen Debmani, of Public Health Service, Siam.

\* \* \*

## INCIDENCE OF CERTAIN REPORTABLE DISEASES

Disease	July, 1949	July, 1948
Diphtheria .....	6	5
Gonorrhea .....	729	797
Lobar pneumonia .....	67	58
Measles .....	934	2,078
Meningococcic meningitis .....	10	6
Pertussis .....	336	115
Poliomyelitis .....	298	40
Rheumatic fever .....	33	24
Scarlet fever .....	110	117
Syphilis .....	558	966
Tuberculosis .....	519	776
Typhoid fever .....	4	4
Undulant fever .....	11	28
Smallpox .....	0	0

Many testicular tumors often have a small associated hydrocele.

\* \* \*

No case of cancer of the penis has been described in a man who was circumcised soon after birth.

\* \* \*

Practically all primary malignancies of the bladder are epithelial in origin.

• Licensed by State of Michigan, Dept. of Mental Health • Registered by American Medical Association

# ST. JOSEPH'S RETREAT



*Founded in 1860*

*Under direction of  
Daughters of Charity  
of St. Vincent de Paul*

Newly reorganized and modernized for individualized care and treatment of the nervous and mentally ill and alcoholics.

*Martin H. Hoffmann, M. D.  
Medical Superintendent*

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The Only Money-saving Clothes  
are QUALITY CLOTHES

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Fall arrivals in LEBOW CLOTHES  
as a very sound investment!

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## NEWS MEDICAL

*1948 Michigan Rural Health Conference Booklet Available.* An attractive brochure chronicling the activities and accomplishments of the Second Annual Michigan Rural Health Conference held last Fall in East Lansing is now available free through requests made to the Michigan Health Council, 706 North Washington Avenue, Lansing, Michigan.

In addition to detailing the meetings and discussions of the 1948 Conference, the brochure is valuable as a guide to the problems that will appear during the course of the 1949 Conference to be held in Grand Rapids, October 28-29.

\* \* \*

*Michigan Doctors of Medicine* who registered at the American Medical Association annual session in Atlantic City last June included:

*Tuesday, June 7, 1949.*—B. H. Bader, Detroit; Charles J. Barone, Highland Park; Morrison D., Beers, Detroit; William C. Behen, Lansing; Albert E. Bernstein, Detroit; David S. Brachman, Detroit; Morris M. Braverman, Detroit; Philip H. Broudo, Detroit; A. S. Brunk, Detroit; Mary B. Campbell, Port Huron; Harry E. Carnes, Detroit; M. S. Chambers, Flint; William P. Chester, Detroit; Daniel E. Cohn, Detroit; Joseph H. Curhan, Detroit; Carleton Dean, Lansing; Frederick W. De Young, Spring Lake; Robert K. Dixon, Detroit; Howard P. Doub, Detroit; Thomas Eichkhorst, Flint; David B. Dolese, Detroit; L. Fernald Foster, Bay City; Mary Margaret Frazer, Detroit; Harold A. Furlong, Pontiac; Nathaniel Gates, Detroit; Norman K. H'Amada, Detroit; Clyde K. Hasley, Detroit; Wilfrid Haughey, Battle Creek; Dan R. Herkimer, Lincoln Park; William A. Hudson, Detroit; W. Leonard Howard, Northville; Alice S. Bush Whipple, Lapeer; H. A. Jarre, Detroit; Charles G. Johnston, Detroit; Harry Kirschbaum, Detroit; James Lightbody, Detroit; Fred P. Maibauer, Wyandotte; Joseph M. Markel, Dearborn; John G. Matter, Detroit; Daniel B. Marcus, Detroit; Ray S. Morrish, Flint; Coleman Mopper, Detroit; John M. Murphy, Detroit; William A. Murray, Detroit; Max Karl Newman, Detroit; Grover C. Penberth, Detroit; Pauline Pevin, Detroit; Joseph L. Posch, Detroit; William D. Robinson, Ann Arbor; H. C. Robinson, Grand Rapids; James R. Rogin, Detroit; Harry C. Saltzstein, Detroit; David J. Sandweiss, Detroit; W. Harvey Shipton, Detroit; Harper G. Sichler, Lansing; M. M. Silverman, Detroit; Edward F. Sladek, Traverse City; Hugh H. Steele, Detroit; Eugene J. Steinberger, Detroit; Charley J. Smyth, Plymouth; Har- ray L. Stewart, Jr., Detroit; Clayton K. Stroup, Flint;

Cyrus C. Sturgis, Ann Arbor; David L. Sugar, Detroit; Burt R. Shurly, Detroit; Milton R. Weed, Detroit; C. J. Williams, Grosse Pointe; Alfred H. Whittaker, Detroit; Samson S. Wittenburg, Detroit; Warren Wood Babcock, Detroit.

*Wednesday, June 8, 1949.*—Frank H. Bethell, Ann Arbor; Earl L. Burbidge, Kalamazoo; Charles M. Burgess, Detroit; Ralph M. Burke, Detroit; Joseph Carp, Detroit; Sidney Charnas, Detroit; Ronald E. Clark, Detroit; Wyman C. C. Cole, Detroit; Robert L. Cowen, Detroit; Harold D. Crane, Grand Rapids; Clarence E. Crook, Ann Arbor; J. S. DeTar, Milan; C. H. Eisman, Detroit; Louis J. Gariepy, Detroit; Abe S. Goldstein, Detroit; Hilda A. Habenicht, Jackson; F. W. Hartman, Detroit; Fred Jenner Hodges, Ann Arbor; John P. Hubbard, Detroit; S. Sprigg Jacob, East Lansing; Robert H. Juzek, Ann Arbor; Zeno L. Kaminski, Detroit; David N. Kilmer, Reed City; T. Kolyoord, Battle Creek; Adam W. Kossayda, Detroit; Virginia D. Lanzun, Detroit; Fred O. Lepley, Detroit; T. Leucutia, Detroit; Arthur G. Liddicoat, Detroit; Norman L. Lindquist, Escanaba; Earl F. Lutz, Detroit; Richard S. Malone, Detroit; R. M. Martin, Detroit; J. Earl McIntyre, Lansing; Howard H. McNeill, Pontiac; Muriel C. Meyers, Ann Arbor; P. B. Northouse, Grand Rapids; Edward J. Panzner, Detroit; S. M. Pearson, Bay City; Carol Platz, Detroit; J. D. Plekker, Grand Rapids; Joe D. Pree, Grand Rapids; Clifford Randolph, Detroit; H. Walter Reed, Detroit; George Ritter, Detroit; Thomas Sage, Detroit; Raymond J. Screen, Detroit; Alvin H. Seibert, Grosse Pointe; George Sewell, Detroit; V. E. Slahetka, Detroit; Eleanor Smith, Ann Arbor; B. W. Stockwell, Detroit; Homer H. Stryker, Kalamazoo; G. J. Stuart, Grand Rapids; Palmer E. Sutton, Royal Oak; Ivan B. Taylor, Detroit; Henry Turkey, Detroit; F. I. Van Wagner, Jackson; Roger V. Walker, Detroit; J. Edwin Watson, Detroit; Bernard Weston, Detroit; Frank C. Witter, Detroit; Hackley E. Woodford, Benton Harbor; W. R. Wreggit, Highland Park; D. R. Wright, Flint.

*Thursday, June 9, 1949.*—William M. Bell, Detroit; Ord C. Blackledge, Detroit; Harold A. Bjork, St. Joseph; Osborne A. Brines, Detroit; Donald Channler, Grand Rapids; Fillmore S. Curry, Detroit; Gerald W. Edmonds, Detroit; Harold F. Falls, Ann Arbor; Lynn A. Ferguson, Grand Rapids; C. P. Hodgkinson, Detroit; John F. Holt, Ann Arbor; Henry P. Kooistra, Grand Rapids; James R. Linton, Eloise; David H. Lynn, Detroit; Don Marshall, Kalamazoo; Evelyn W. Marshall,

(Continued on Page 1184)



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**SCILLAREN**® pure cardiac glycosides of squill

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Quality  
is the  
best  
Investment  
in the  
long run!



**KILGORE and HURD**  
1259 WASHINGTON BLVD  IN THE BOOK TOWER

DETROIT'S  
MOST CORRECT  
ADDRESS

(Continued from Page 1182)

Kalamazoo; N. H. Moss, Detroit; James A. Olson, Detroit; Hermann Pinkus, Monroe; Earl C. Potter, Lansing; Geza Schinagel, Detroit.

*Friday, June 10, 1949.*—Arnold Albright, Battle Creek; Robert C. Bassett, Ann Arbor; Benjamin Juliar, Detroit; Charles S. Lueth, Detroit; Earl E. Parker, Lesle; Eugene Martin Savignac, Detroit; Sara D. Schweinsberg, Marquette; Martha R. Westerberg, Ann Arbor.

\* \* \*

*Stokes Says*—"60 per cent of the diagnosis of syphilis depends on laboratory procedures; 40 per cent depends on routine painstaking physical examination."

At least attempt to get corroborative evidence of clinical syphilis before diagnosing and treating your patient who has a positive Kahn.—*From Committee on Venereal Disease Control.*

\* \* \*

*The Third Inter-American Congress of Radiology* is scheduled for Santiago, Chile, November 11-17, 1949 at Hotel Crillon. For information and program, write James T. Case, M.D., Room 1421 55 E. Washington St., Chicago 2, Illinois.

\* \* \*

*The Pomeroy-MacFarland Co.*, which has operated a surgical appliance business in Detroit for forty years, made plans on October 1, 1949, to continue for business not as a corporation but through individual ownership by Frank C. Macfarland, former president of the Pomeroy Macfarland Company.

\* \* \*

*The National Gastroenterological Association* will hold its 14th Scientific Session at the Somerset in Boston, Mass., October 24-26, 1949. For information and Program, write the Secretary at 1819 Broadway, N. Y. 23, N. Y.

\* \* \*

*Diabetes detection.*—The appointment of Diabetes Detection Committees have been reported by the following county medical societies of Michigan: Bay, Berrien, Calhoun, Clinton, Gogebic, Huron, Kalamazoo, Kent, Manistee, Medical Society of Northern Michigan, Menominee, Midland, Ontonagon, Sanilac, St. Clair, and Wayne.

The MSMS Committee on Geriatrics recommends that all county medical societies appoint a Diabetes Detection Committee prior to the Diabetes Detection Drive scheduled for the autumn of 1949.

\* \* \*

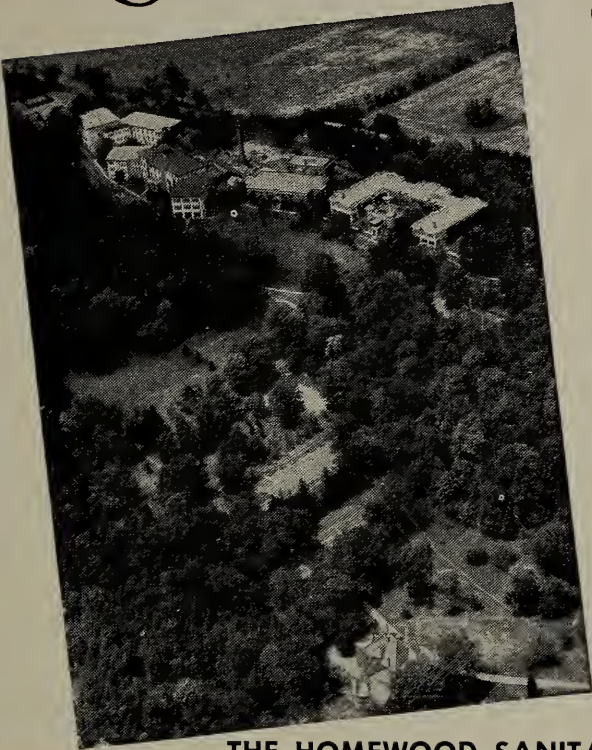
*The 116th meeting of the American Association for the Advancement of Science* will be held in New York, December 26-31, 1949, with the Pennsylvania Hotel as headquarters. For Program and information, write Raymond L. Taylor, 1515 Massachusetts Ave. N.W., Washington 6, D. C.

\* \* \*

*Medical motion pictures.*—For copy of informative brochure "Reviews of Medical Motion Pictures" for list of films available through the Motion Picture Library

(Continued on Page 1186)

# Homewood Sanitarium



Homewood is a fully equipped 200 bed Private Sanitarium with its over 90 acres of beautiful countryside situated at Guelph, Ontario, only sixty miles from Toronto. Nervous and mild mental disorders and also a limited number of suitable cases of long standing mental illness, habit cases and cases of senility are admitted. Under the direction of a staff of Psychiatric Specialists and Physicians, all modern methods of treatment are available, including Psychotherapy, Insulin, Electroshock and Electronarcosis combined with fully up-to-date Physiotherapy, Occupational and Recreational therapy. Rates are from \$56.00 to \$75.00 per week which includes comfortable accommodation, meals, ordinary medicine and nursing care, ordinary laboratory procedures, physiotherapy, psychotherapy and occupational and recreational therapy. Write for illustrated folder.

F. H. C. BAUGH, M.D.C.M.  
Medical Supt.

THE HOMWOOD SANITARIUM OF GUELPH, ONTARIO, LIMITED



## Buttermilk...

**a beverage with unique values**

Buttermilk in the bottle is in the same state which sweet milk reaches when it is first acted upon by the digestive juices. Therefore it is partially pre-digested. Moreover, there is little chance of it forming hard, tough curd-masses in the intestinal tract.

These are some of the unique values of buttermilk in combating certain intestinal derangements among infants and adults, in relieving constipation and alleviating stomach disorders. For buttermilk of uniformly high quality, made with pasteurized milk, may we suggest Sealtest Buttermilk?



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**EBLING CREAMERY**





**SURGICAL CORSETS  
SPINAL BRACES  
ARTIFICIAL LIMBS  
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(Continued from Page 1184)

of the American Medical Association, members of the Michigan State Medical Society may write Ralph P. Creer, Secretary, Committee on Medical Motion Pictures, AMA, 535 N. Dearborn, Chicago 10.

\* \* \*

**Hospital Construction Progress.**—The following progress report on Michigan hospital construction under the federal program, as of July 1, 1949, is brought to you through the courtesy of the state office of Hospital Survey and Construction. Hospital projects now under construction with federal funds allotted to Michigan for the period July 1, 1947 to June 30, 1948:

Name	Location	Estimated Cost	Estimated Federal Share
Marshall B. Lloyd Clinic	Menominee	\$ 785,912.00	\$ 261,971.00
Rogers City Hospital	Rogers City	437,061.00	145,687.00
Schoolcraft County Mem. Hospital	Manistique	392,121.00	130,707.00
St. Joseph Hospital	St. Joseph	1,836,300.00	612,100.00
Mercy Hospital	Benton Harbor	1,216,260.00	405,420.00
Holland City Hospital	Holland	318,526.17	92,439.00
St. Luke's Hospital	Saginaw	2,107,278.00	521,672.00
St. Luke's Hospital (carried over to next period)			180,754.00
		<b>\$9,801,862.17</b>	<b>\$2,169,996.00</b>

Hospital projects now under construction with federal funds allotted to Michigan for the period July 1, 1948 to June 30, 1949:

Name	Location	Estimated Cost	Estimated Federal Share
Women's Hospital	Flint	\$2,741,403.00	\$ 902,801.00
(Approved for 1950 construction)			
Sturgis Memorial Hospital	Sturgis	500,700.00	166,900.00
Pennock Hospital	Hastings	421,500.00	140,500.00
Paul Oliver Hospital	Frankfort	239,160.00	79,720.00
Three Rivers Hospital	Three Rivers	460,000.00	153,333.00
St. Luke's Hospital	Saginaw	(carry over)	180,754.00
St. Joseph Hospital	Hancock	2,500,000.00	300,669.00
St. Joseph Hospital (carry over to next period)			532,664.00
		<b>\$9,720,041.00</b>	<b>\$2,174,668.00</b>

Hospital projects approved for 1951 construction with federal funds allotted for the period of July 1, 1949 to June 30, 1950:

Name	Location	Estimated Cost	Estimated Federal Share
Dickinson County Memorial Hospital	Iron Mountain	\$ 825,000.00	\$ 275,000.00
St. Joseph Hospital	Hancock	(carry over)	532,664.00
United Memorial Hospital	Greenville	874,230.00	291,410.00
James Decker Munson Hospital	Traverse City	819,000.00	273,000.00
Oakwood Hospital	Dearborn	4,326,900.00	200,000.00
Oakwood Hospital (carry over to next period)			1,442,300.00
James Sheldon Memorial Hospital	Albion	345,000.00	115,000.00
Kalamazoo State Hospital	Kalamazoo	900,000.00	300,000.00
Mary Free Bed Guild Grand Rapids	Grand Rapids	227,000.00	75,667.00
Oaklawn Hospital	Marshall	480,000.00	25,000.00
Oaklawn Hospital (carry over to next period)			135,000.00
South Haven Hospital	South Haven	156,000.00	52,000.00
Tuberculosis Sanatorium (State)	Hancock	1,050,000.00	350,000.00
Lee Memorial Hospital	Dowagiac	1,020,000.00	25,000.00
Lee Memorial Hospital (carry over to next period)			315,000.00
Reserve			49,611.00
		<b>\$13,523,130.00</b>	<b>\$2,546,352.00</b>

(Continued on Page 1188)

L. Fernald Foster, M.D., Bay City, addressed the national convention of the Medical Fraternity, Alpha Kappa Kappa, in Ann Arbor on September 3. His subject was "New Trends in Medical Economics."

\* \* \*

C. E. Umphrey, M.D., Detroit, spoke to the Detroit Society of Engineers on September 15. His subject was "The Promotion of Medicine's Legal and Ethical Responsibilities."

\* \* \*

The Michigan Nursing Center Association announces a Laymen's Conference on Nursing at Michigan State College on October 4. This conference is arranged to bring hospital board and committee members and school of nursing committees together with laymen in public health nursing to take a broad view of nursing and "what can be done about it."

All members of the Michigan State Medical Society are cordially invited to the October 4 meeting in East Lansing. For program, write the Association, 750 E. Main Street, Lansing 12.

\* \* \*

The Association of American Physicians and Surgeons will hold its sixth Annual Delegates and Members Meeting at the Book-Cadillac Hotel, Detroit, on October 28-29. Senator Herbert R. O'Connor, M.D., Maryland, will discuss legislation encouraging voluntary insurance plans;

R. B. Robins, M.D., Arkansas, will speak on "The Doctor's Responsibility as a Citizen." For complete program and further information, write to the Secretary, 360 N. Michigan Ave., Chicago 1.

\* \* \*

Purdue University offers a short course in basic radiographic procedure for technicians attached to the laboratories of doctors of medicine and hospitals, October 3-7, 1949. The course is offered in co-operation with the General Electric X-Ray Corporation. For detailed information on classes and accommodations, write Co-ordinator of Adult Education, Technical Extension Division, Purdue, Lafayette, Indiana.

\* \* \*

A postgraduate course in Chest Diseases has been arranged by the Council on Postgraduate Medical Education and the New York State Chapter of the American College of Chest Physicians in New York City, which will be held November 14 through 18. There will be five full days of instruction, both forenoon and afternoon. All sessions will be held in Hotel New Yorker. Veterans who are applying for education benefits under statutes will present certificates of eligibility at the time of registration and will receive a refund in the amount approved by the Veterans Administration.

Those interested should apply to the American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

## SPECIFIC DESENSITIZATION is the aim in Ragweed Pollinosis..

The antihistaminic drugs "do not replace the more lasting benefit obtainable by successful specific . . . desensitization."

Feinberg, S. M.: Postgrad. Med. 3: 92 (1948).

"Apparently, desensitization treatment is still the method of choice, and the antihistaminic drugs cannot be considered as substitutes."

Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).

The antihistaminic drugs "are valuable additions to our armamentarium, but do not . . . supplant the specific desensitizing injections."

Brown, G. T.: M. Ann. District of Columbia 16:675 (1947).

Pollen desensitization "still remains the treatment of choice in hay fever."

Rosen, F. L.: J. M. Soc. New Jersey 45: 390 (1948).

### DIAGNOSTIC AND TREATMENT SETS

**State Pollen Diagnostic Sets (\$7.50):** Dry pollen allergens selected according to state; 1 vial house-dust allergen. Material for 30 tests in each vial.

**Stock Treatment Sets (\$7.50):** Each consisting of a series of dilutions of pollen extracts for hypsensitization, with accompanying dosage schedule. Single pollens or a choice of 21 different mixtures. Five 3-cc. vials in each set—1:10,000, 1:5,000, 1:1,000, 1:500, and 1:100 concentrations.

#### Special Mixture Treatment Sets (\$10.00)

Mixtures of pollen extracts specially prepared according to the patient's individual sensitivities. Ten days' processing time required.

Arlington offers a full line of potent, carefully prepared, and properly preserved allergenic extracts for diagnosis and treatment—pollens, foods, epidermols, fungi, and incidentals.

Literature to physicians on request.

*Arlington*

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**NEW!***of course***ELIXIR MESOPIN**

(homatropine methyl bromide)

*is Council-accepted!!*

Elixir Mesopin permits the administration of a proven gastrointestinal antispasmodic—highly selective in its action—in a liquid form. It may be prescribed alone or in combination with many other commonly used drugs. In digestive tract pain due to spasticity and hyperactivity, Mesopin provides prompt relief with virtual freedom from the undesirable side effects of atropine and belladonna. Effective relief of gastrointestinal spasticity may be obtained in such conditions as peptic ulcer, dyspepsia, flatulence, biliary disease, and constipation.

Supplied on prescription in 16-ounce bottles, each teaspoonful contains 2.5 mg. Mesopin, the equivalent of one Mesopin tablet. Dosage: Adults, one to two teaspoonfuls; Infants, 15 to 20 drops.

Mesopin Tablets (2.5 mg.) also available.

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*(Continued from Page 1186)*

The Michigan Rheumatic Fever Control Program (thirty centers throughout the state) acknowledges with deep appreciation two recent contributions toward its budget for the year ending June 30, 1950. The Michigan Heart Association has contributed the sum of \$32,515.72 and the Michigan Society for Crippled Children and Adults has continued its annual grant, this year in the sum of \$6,000. The work of the unique Rheumatic Fever Control Program will go forward, thanks to the generous financial help of these two co-operating agencies.

\* \* \*

Frederick C. Lendrum, M.D., Chicago, has been promoted to the rank of associate professor in medicine at the University of Illinois College of Medicine, it was announced by Dr. John B. Youmans, dean of the college.

Dr. Lendrum formerly held the position of assistant professor. He received the bachelor of arts degree from Ohio Wesleyan University, the doctor of medicine degree from the University of Michigan Medical School, and the doctor of philosophy degree from Mayo Foundation at the University of Minnesota.

Prior to coming to the University of Illinois, Dr. Lendrum did research work at Mayo Foundation, the Wisconsin Alumni Research Foundation, and at the Medical Research Institute in Detroit.

Dr. Lendrum is a member of Phi Beta Kappa, scholastic honorary fraternity; Alpha Omega Alpha, honorary medical fraternity; and Sigma Xi, research organization.

\* \* \*

Senator and Mrs. Arthur H. Vandenburg have enrolled in the Michigan Blue Cross-Blue Shield. They have the hospital-medical-surgical plan through the Michigan legislative group. Our members will be interested in knowing that our Senior Senator is wholeheartedly supporting our voluntary, non-profit, medical plans.

\* \* \*

*Medical Authors*

H. Paul Sugar, M.D., of Detroit, published a paper, "Surgical Treatment of Pterygium" in Amer. Jour. of Ophthalmology, July, 1949.

Joseph L. Ponka, M.D., and Conrad R. Lam, M.D., of Detroit, published a paper, "Effect of Application of Several Antibacterial Substances on Healing of Wounds," in the Archives of Surgery, July, 1949.

Myles J. Gullickson, M.D., James H. McRae, M.D., and Darrell A. Campbell, M.D., of Eloise published a paper, "Vagovagal Reflexes; Electrocardiographic Changes During Vagotomy." In S. G. and O., August, 1949.

Alfred D. LaFerte, M.D., Detroit, published a paper on "Fractures" in August, 1949, Industrial Medicine and Surgery.

\* \* \*

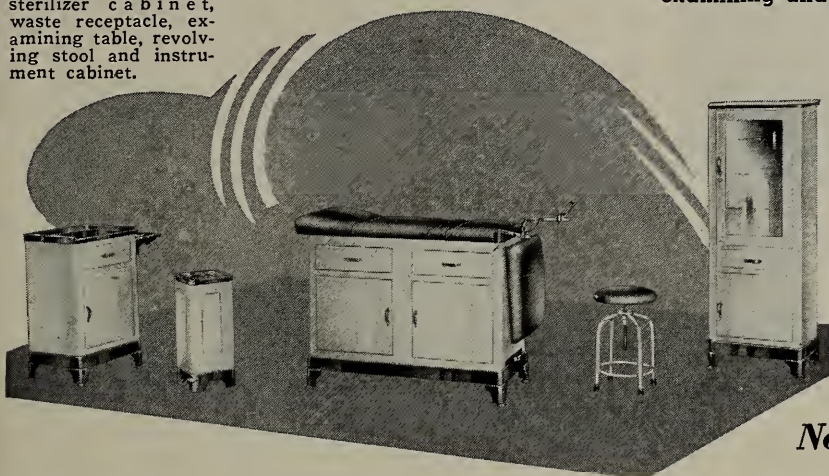
James R. McVay, M.D., Kansas City, was re-elected chairman of the AMA Council on Medical Service, and Elmer Hess, M.D., Erie, Pa., was re-elected vice chairman at a one-day meeting of the Council in Chicago, July 16.

*(Continued on Page 1190)*

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(Continued from Page 1188)

The executive committee for the coming year will be made up of Drs. McVay, Hess, and J. D. McCarthy, Omaha, Nebraska.

The Council renewed the Seal of Acceptance for the following four voluntary prepayment medical care plans:

Louisiana Physicians Service, Inc.; New Hampshire-Vermont Physician Service; Mutual Medical Insurance, Inc. (Indiana); and the Missouri Medical Service.

Three additional plans are to be examined further to determine their eligibility for renewal of the seal. Eligibility is determined every two years.

\* \* \*

*Consultants in Far East.*—A team of consultants composed of Col. Warner F. Bowers of the Surgeon General's office, Russell H. DeJong, M.D., of the Neuropsychiatry department of University of Michigan, with two others left Washington, D. C., on a 35-day trip to the Far East Command. They visited Tripler Army General Hospital en route, and expect to visit all Army General Hospitals in Japan, the Philippines, Okinawa and Guam.

As now organized, the Civilian Consultants Program sends teams of eminent civilian medical and surgical specialists each month to Army and Navy hospitals in Europe, the Far East, and the Panama Canal Zone. The mission of the program is to give Medical Department personnel overseas, especially the younger physicians, the benefit of graduate medical teaching, as well as to have the consultants available for consultation and care of patients.

\* \* \*

*State Board Examinations.*—The regular annual meeting of the Michigan State Board of Registration in Medicine will be held on Tuesday, October 11, 1949, in Parlor A, Olds Hotel, Lansing, Michigan. The examination will be given on Wednesday, Thursday, and Friday, October 12, 13, and 14, 1949, in the Senate Chamber of the State Capitol building, Lansing, Michigan.

\* \* \*

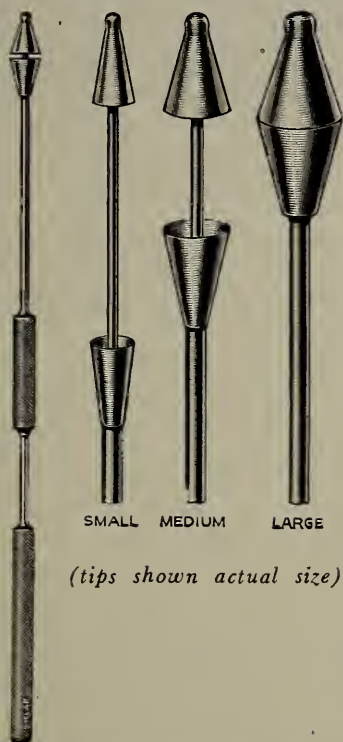
*Diabetes Detection Week.*—It is the aim of the joint committee from the State Society and the Michigan Diabetes Association to stimulate in all physicians a continuing year-round awareness of diabetes and a persistent search for this disease in all of their patients. To this end the following suggestions are offered:

1. Routine urinalysis with testing for sugar with any one of the simple tests should be done on all patients.
2. Whenever possible, the relatives of diabetics should be tested in the same way. These and obese people are especially prone to develop diabetes and deserve closer attention than others.
3. Urinary sugar tests should be made on all pre-operative and post-partum patients.
4. A blood sugar estimation should be made on all those whose urine is positive.

If every doctor would follow these instructions, the multitude of unknown and unsuspecting diabetics now uncontrolled would be helped by adequate treatment with prevention of many serious complications.

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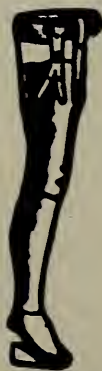
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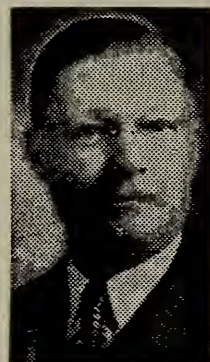
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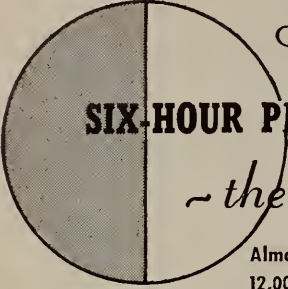
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Communications

To to Editor:

The annual meeting of the American Board of Obstetrics and Gynecology was held in Chicago, Illinois, from May 8 to 14, 1949, at which time 236 candidates were certified.

New Bulletins, incorporating changes made at the recent meeting, are now available for distribution upon application and give details of all new regulations.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States and Canada on Friday, February 3, 1950. Application may be made until November 5, 1949. Application forms and Bulletins are sent upon request made to American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

Dear Doctor Haughey:

The American College of Radiology views with alarm and dismay all proposed programs relating to the distribution of medical services which place the diagnostic aspects of medicine in a category apart from the general practice of medicine.

.....not a few prominent members of the medical profession have recently promulgated plans emphasizing a difference in what they have termed "the practice of the diagnostic specialties" and the practice of medicine. The American College of Radiology is most disturbed by these medical spokesmen in that they have apparently seen in the socialization of diagnostic medicine relief from demands for socialization of all medicine. There is a tragic error. The medical profession and most of the rest of the nation has come to understand that medicine cannot and will not be socialized in a vacuum. The socialization of any group, or segment of a group, is but a precursor of things to come. Medicine must not weaken its stand for freedom by partial appeasement and thus fall victim to piecemeal socialization. Abraham Lincoln observed that, "No nation can long endure half slave and half free." It should be even more obvious that no profession can permanently maintain this imbalance.

It would be appreciated if you would bring this statement on the part of the American College of Radiology to the attention of all members of your group.

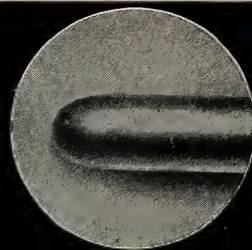
Respectfully,

WILLIAM C. STRONACH

August 1, 1949

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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting September 12, October 10, November 7.

Surgical Anatomy and Clinical Surgery, two weeks, starting September 26, October 24, November 21.

Surgery of Colon and Rectum, one week, starting October 10, November 28.

Esophageal Surgery, one week, starting October 10.

Thoracic Surgery, one week, starting October 3.

Breast and Thyroid Surgery, one week, starting October 10.

Fractures and Traumatic Surgery, two weeks, starting October 3.

**GYNECOLOGY**—Intensive Course, two weeks, starting September 26, October 24.

Vaginal Approach to Pelvic Surgery, one week, starting September 19, November 7.

**OBSTETRICS**—Intensive Course, two weeks, starting September 12, November 7.

**MEDICINE**—Intensive General Course, two weeks, starting October 3.

Gastroenterology, two weeks, starting October 24.

Gastroscopy, two weeks, starting September 26, October 24.

**DERMATOLOGY**—Formal Course, two weeks, starting October 24. Informal Clinical Course every two weeks.

**ROENTGENOLOGY**—Diagnostic and Lecture Course first Monday of every month.

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**UROLOGY**—Intensive Course, two weeks, starting, September 26.

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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**HELP YOURSELF TO BETTER SIGHT.** By Margaret Darst Corbett. New York: Prentice-Hall, Inc., 1949. Price \$2.50.

This book is an exposition of the so-called Bates Method of Eye Education. It consists of a long series of exercises and tricks to stimulate the quicker action of the eyes. The author conducts a school in Los Angeles teaching the method of better vision. We have read it carefully and can find no solution to the problem of useful vision for all the classes of patients who must undergo a long and tedious process to avoid the use of glasses. It must be expensive, and unending.

Tricks of quick reading are described, and schemes for correcting cross eyes. The theory is that the extrinsic rectus muscles lengthen the eye and the obliques flatten it, thus accounting for accommodation for near or far. "If you, little by little, extract from each day increasing visual relaxation, you will gradually build for yourself permanent visual skill for all future needs." "Relax and let your eyes adjust themselves to the distances required by your daily life." It is a novel exposition of plan for continuous training of patients who want to see, but who do not want glasses. We are skeptical.

**FEMALE SEX ENDOCRINOLOGY—CONCISE THERAPY.** By Charles H. Birnberg, M.D., Associate Obstetrician, Chief of Female Sex Endocrinology, and Endocrine Laboratory Jewish Hospital of Brooklyn. 30 Illustrations including 3 in color. Philadelphia: J. B. Lippincott Co., 1949. Price \$4.00.

The author has given a series of lectures in his post-graduate course on sex endocrinology, and this book is an outgrowth of the lectures bearing on the female endocrine disturbances. During the reproductive period, woman is subjected to many endocrine assaults, to which man is not subjected. These few chapters give a comprehensive classification of the involved conditions.

**SHEARER'S MANUAL OF HUMAN DISSECTION.** Edited by Charles E. Tobin, Ph.D., Associate Professor of Anatomy, The University of Rochester School of Medicine and Dentistry. Second Edition. Philadelphia and Toronto: The Blakiston Company, 1949. Price \$4.50.

Human body dissection needs a carefully arranged procedure, and here is a book with sufficient detail of description, but with accompanying outlines. The care of instruments is stressed, for without proper technique the value to be gained from the study is lost. A very handy and complete manual.

**MEDICINE THROUGHOUT ANTIQUITY.** By Benjamin Lee Gordon, M.D., Member Association of the History of Medicine, and American Academy of Ophthalmology and Otolaryngology. Certified American Board of Ophthalmology, etc.; Attending Ophthalmologist to Shore Memorial Hospital, Somers Point, New Jersey, and to Atlantic County Hospital for Tuberculous Diseases, and Atlantic County Hospital for Mental Diseases, Northfield, N. J. Author "The Romance of Medicine." Foreword by Dr. Max Neuburger. 157 illustrations. Philadelphia: F. A. Davis Company, 1949. Price \$6.00.

The author has departed from the ordinary history of medicine. He has gone back to the beginnings, showing the development of medical thought and experience from the beginning of life and long before recorded times. He quotes the ancient doctors and ancient records, and has

(Continued on Page 1196)





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**RANDALL ROBSON**

Randall Robson, who joined the staff of PM's Saginaw office immediately after receiving his degree in Business Administration from Michigan State College early this year. During the war he served for three years in the U. S. Army. Some of his hobbies are book collecting, horticulture and fishing.

(Continued from Page 1194)

delves largely into the fields of archeology, anthropology and paleopathology. He goes way beyond the realms of written history. The book is intensely interesting and full of facts and conjectures that lead far into the realm of research and study.

**GERIATRIC MEDICINE**—The Care of the Aging and the Aged. Edited by Edward J. Stieglitz, M.S., M.D., F.A.C.P., Attending Internist, Suburban Hospital, Bethesda, Maryland; Doctor's Hospital, Washington, D. C. New, 2nd edition. 773 pages, with 180 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$12.00.

In the five years since the publication of the first edition of this book, geriatric medicine has grown beyond all dreams, and the specialty and the book have proven a great success. Aged people are present in ever-increasing numbers and proportions due to our having increased the span of life. Older people have especial problems of health and life, and that makes a wonderful field for the doctor who is willing to give it his time. This book is a great help and source of instruction and stipulation. It is a text every doctor needs on his shelf.

**PRESENT CONCEPTS OF REHABILITATION IN TUBERCULOSIS.** A Review of the Literature, 1938-1947. By Norvin C. Kiefer, M.D., M.P.H., Senior Surgeon, United States Public Health Service; Assistant to the Chief Tuberculosis Control Division, United States Public Health Service, Federal Security Agency. New York: National Tuberculosis Association, 1948.

Nearly 1,000 articles on tuberculosis and its control were studied. This book is the result and presents in authentic form about all that is known from the literature of the past ten years about rehabilitation. There are chapters on agencies dealing with rehabilitation, types of programs, personnel requirements for rehabilitation staff and future programs. This is a well-written and very useful volume.

**THE COMPLETE PEDIATRICIAN—PRACTICAL, DIAGNOSTIC, THERAPEUTIC AND PREVENTIVE PEDIATRICS.** Sixth Edition for the use of Medical Students, Interns, General Practitioners and Pediatricians. By Wilburt C. Davison, M.A.,

D.Sc., LL.D., M.D. Professor of Pediatrics, Duke University School of Medicine, and Pediatrician, Duke Hospital. Formerly, Acting Head of Department of Pediatrics, The Johns Hopkins University School of Medicine, Acting Pediatrician in Charge, The Johns Hopkins Hospital. Member, American Board of Pediatrics; Fellow, American Academy of Pediatrics and American College of Physicians; Member, American Pediatric Society and Division of Medical Sciences, National Research Council. Durham, N. C.; Seaman Printery for Duke University Press, 1949. Price \$4.50.

This edition of this valuable book has been considerably enlarged and reorganized. It is a never-ending mystery to this reviewer as to how one can pack the amount of information contained in this volume into such small compass. As a trial, we checked ten recent papers which contained some new concept, against this edition, and in each case found the newer information was included. Used as it is intended to be used i.e., as a quick reference to refresh the memory, this book is invaluable and should be on the shelves of every practicing physician. H.F.B.

**THE USES OF PENICILLIN AND STREPTOMYCIN.** By Chester Scott Keefer, M.D., Wade Professor of Medicine, Boston University School of Medicine; Director of Evans Memorial and Physician-in-Chief of the Massachusetts Memorial Hospitals. Porter Lectures, Series 15. Lawrence, Kansas: University of Kansas Press, 1949. Price \$2.00.

This is a series of three lectures delivered at the University of Kansas in the memorial series established in honor of J. F. Porter, M.D., who went to Kansas after his graduation from Rush Medical College in 1881. This is a very interesting group of lectures on the uses of these two antibiotics. It is an authoritative summary of the known facts about the drugs in medical and surgical practice.

**SKIN PROBLEMS FACING YOUNG MEN AND WOMEN.** By Herbert Lawrence, M.D., Diplomate, American Board of Dermatology. San Francisco: Timely Publications, 1949. Price, \$1.50.

Most young men and women, or boys and girls between the ages of thirteen and nineteen, have the skin disorder known as acne. The treatment is well established, and here is a book published for the express purpose of enlightening them on the care of their own skin in order

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ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY of the American Medical Association for 1948; With the Comments that have Appeared in the Journal. Chicago: The American Medical Association, 1949.

This book brings together in one small volume all the reports that have appeared throughout the year in THE JOURNAL AMA. It is a convenient reference.

TONICS AND SEDATIVES. Selected from his favorites by Morris Fishbein, M.D., Editor of the Journal of the American Medical Association; with 51 original drawings by Page Cary. Philadelphia: J. B. Lippincott Company, 1949. Price \$2.00.

This is a pocket size book of medical humor, Dr. Fishbein's best as presented over the years in *The Journal of the AMA*. A good book for an hour's relaxation.

OUTWITTING YOUR YEARS. By Clarence William Lieb, M.A., M.D., New York: Prentice Hall, Inc. 1949. Price \$2.75.

Dr. Lieb practiced medicine, Geriatrics, for many years, then retired to live his life. He tells in this book much of his philosophy of life. He asks many questions and proceeds to answer them: When to retire? Is youth superior to age? He tells that cancer is not part of the aging process. Blood pressure gets attention, favorably. The book is delightful reading, gives us much hope of the later years, and the last sentence gives a final glimpse into the mind of the philosopher, "The supreme alchemy in the process of outwitting your years is belief in God."

SEPTEMBER, 1949

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# THE JOURNAL

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## HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of August 17, 1949

- Monthly financial reports, including detailed breakdown of Public Education Account and of the Public Education Reserve Account were presented, studied, discussed, and approved. Bills payable for the current month were presented and approved.
- More space for Executive Offices. Negotiations for the purchase of the small building in Lansing, under consideration for several months, are reported at a standstill; the Lansing Planning Commission has rezoned the property to permit its use by the Michigan State Medical Society, but the owner suddenly has changed his mind about the price. The Executive Committee of The Council felt that if this building cannot be purchased within a reasonable time for the sum of money originally agreed upon, the Society will decide upon another site available to MSMS for a permanent home.
- Blood Bank Committee. Several recommendations from the President of the Michigan Pathological Society for the future administration of this Committee were presented to the Executive Committee of The Council.
- Committee reports were accepted from the Venereal Disease Control Committee, the Geriatrics Committee, and the Committee on Study of Health Plans.
- State Health Commissioner A. E. Heustis, M.D. reported on (a) aid in financing the Cancer Control Committee's work; (b) completion of the reorganization of the Michigan Health Department together with the new arrangement for financing of local health departments; and (c) the present status of poliomyelitis in Michigan.
- Public Relations Counsel's Progress report included a résumé of the work done in connection with Truman's Reorganization Plan No. 1 (defeated by the U. S. Senate on August 16); on the recent Convention of the National Medical Association in Detroit; on numerous requests for prints of the new MSMS motion picture "To Your Health"; on the probable syndication of the MSMS radio program "Tell Me, Doctor"; on the excellent work of the Woman's Auxiliary in the CAP Program; on the interesting program of the Michigan Rural Health Conference scheduled for Grand Rapids, October 28-29; on the Michigan Health Survey being made by Michigan State College for MSMS and for the Michigan Foundation for Medical and Health Education, Inc.; and on the MSMS Speakers' Conference scheduled for Grand Rapids on September 22.
- The monthly reports of the President, the President Elect, the Secretary, the Editor, and the General Counsel were approved.
- A Sub-Committee of the Child Welfare Committee, to aid in the program of hearing conservation was appointed with the following personnel: C. F. Brunk, M.D., Detroit, Chairman, F. L. Doran, M.D., Grand Rapids, R. H. Criswell, M.D., Bay City, O. B. McGillicuddy, M.D., Lansing, and R. C. Pochert, M.D., Owosso.
- A vote of sincere thanks was extended to the Michigan Heart Association for its contribution of \$32,515.72 and to the Michigan Society for Crippled Children and Adults, Inc. for its contribution of \$6,000—for continuation of the Michigan Rheumatic Fever Control Program.
- The second Heart and Rheumatic Fever Day was authorized for Saturday, March 11, 1950, immediately following the three-day Michigan Postgraduate Clinical Institute, Book-Cadillac Hotel, Detroit. The monthly report of the Director of the Rheumatic Fever Control Program (Leon DeVel, M.D.) was approved.
- Assignments to the MSMS House of Friendship, at the Annual Session in Grand Rapids, September, 1949, were presented and approved.
- Chairmen of Rheumatic Fever Control Centers: The Executive Committee of The Council re-

*(Continued on Page 1210)*



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## HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 1208)

quested that county medical societies, in whose areas Rheumatic Fever Control Centers exist, be invited to appoint Chairman of their Centers for the year 1949-50.

- A. Hazen Price, M.D., Detroit, was reappointed as MSMS representative to the State Advisory Committee for Practical Nurse Education (a Committee of the Department of Public Instruction).

### AMA ASSESSMENT

Michigan is seventh among the fifty-three constituent societies of the American Medical Association in the payment of the AMA assessment. Eighty-two per cent of Michigan's membership have co-operated and given wholehearted support to their parent organization.

To the other 18 per cent, The MSMS Council recommends that they co-operate to the best of their ability, both through action and financially, with the National Education Campaign of the AMA. Each member should feel it an honor and a privilege to aid the AMA not only by payment of the small AMA assessment but by vigorously entering the medical profession's program of active and direct resistance against attempts to throw the practice of medicine into politics.

### THE ADMINISTRATION'S GRANDIOSE SCHEME

The *Baltimore Sun* has published a series of articles on "What the American Public Would Pay, And What It Would Get If Congress Approves President Truman's Social Welfare Proposals." From the Sunday issue of April 17, 1949, we take the following figures:

Fiscal Year	Low Cost Estimate	High Cost Estimate
1950	\$ 6,225,000,000	\$ 6,725,000,000
1960	16,000,000,000	22,000,000,000
1970	20,600,000,000	27,570,000,000
1980	23,110,000,000	32,400,000,000
1990	27,260,000,000	37,000,000,000
2000	29,300,000,000	39,900,000,000

In commenting on this question, Mr. Rodney Crowther of the Washington Bureau of the *Baltimore Sun* says,

"And at the end of fifty years, the bill every twelve months will be running between \$30 and \$40 billion.

"That's almost the entire national budget for 1950. For the Nation's workers it would mean 15 cents out

of every dollar of payroll for insurance against old age sickness and unemployment.

"Looking ahead fifty years, the President's program—which Arthur J. Altmeyer, Social Security Commissioner, this week called 'a pretty big package'—probably would be costing one and one quarter trillion dollars every thirty years."

### EMPLOYEE BENEFIT PLANS

The Research Council for Economic Security has just completed a survey in six metropolitan areas of the Midwest covering employee benefit plans. The survey covered 34.4 per cent of the firms contacted in the Detroit area reported, 525 in number, representing 478,264 employees or 41 per cent of employed persons in the area. Of the employees covered by the survey, 80.3 per cent have life insurance; 15.5 per cent have pension and retirement; 68.3 per cent have prepaid hospitalization; 62.8 per cent have prepaid surgical benefits; 3.9 per cent have prepaid medical care; 69.7 per cent have organized cash sickness benefit; 21.4 per cent have paid sick leave and 75.4 per cent have organized cash sickness or prepaid sick leaves.

Prepaid hospitalization covers 63.6 per cent through Blue Cross. Prepaid surgical benefits are supplied through Blue Cross-Blue Shield in 69.9 per cent of persons surveyed in Detroit. The report says:

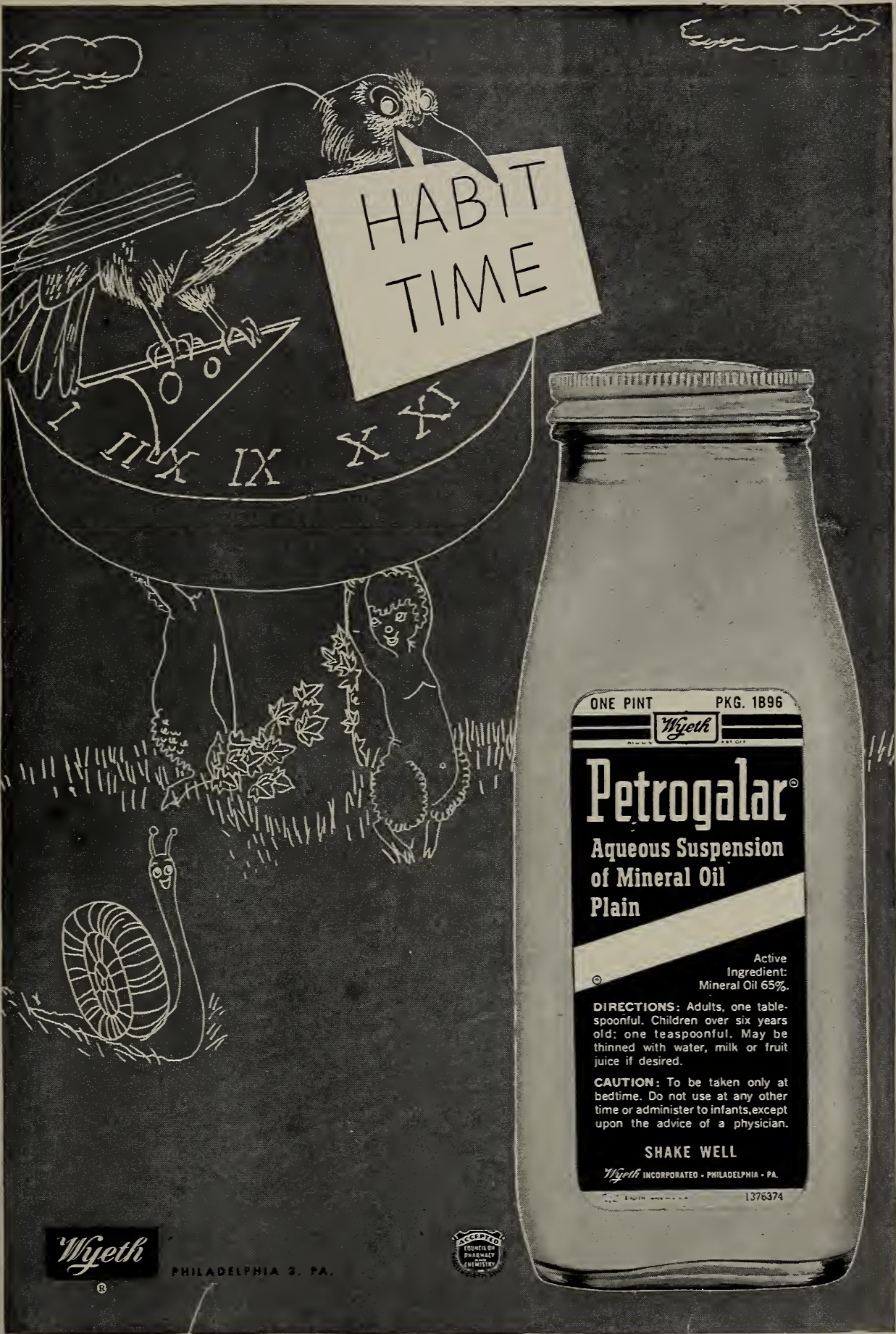
"*Detroit.*—This area shows a very high coverage under prepaid surgical benefit and organized cash sickness plans, high for life insurance, but low for pension retirement systems. In the field of carriers, the Blue Shield plan is dominant in prepaid surgical benefit plans. The portion of the cost of existing programs borne by the employer is generally less than in the other five areas. The active promotion of prepaid surgical benefits by the medical profession in co-operation with Michigan Medical Service accounts for the remarkable development of that program. Excellent leadership and financial management also played a part. Since the employees of the three large automobile manufacturing corporations bulk so large in employment of the Detroit area, the policies and developments in those firms will influence greatly the figures on employee benefit plans."

### POSTGRADUATE COURSE ON URINARY TRACT DISORDERS

On November 17, 18, and 19, 1949, the Frank E. Bunts Institute and the Cleveland Clinic will present a continuation course for physicians on "Medical and Surgical Disorders of the Urinary Tract." Dr. Herman L. Kretschmer of Chicago will give the evening address, November 17, on "Clinical Significance of Hematuria." The other out-of-town guest speaker will be Dr. Louis

(Continued on Page 1252)







# Michigan Medical Service

## MICHIGAN MEDICAL SERVICE LIBERALIZES MEDICAL-SURGICAL CONTRACTS

Dr. R. L. Novy, president of Michigan Medical Service, has announced that the Board of Directors on July 7, 1949, liberalized the *Medical-Surgical* contracts as follows:

Effective September 1, 1949, the number of days of service for *hospitalized* cases under the *Medical-Surgical* certificates (Form GMS-3-49) will be increased from thirty (30) to one hundred and twenty (120) days per certificate year, except that tuberculosis, nervous and mental cases will be limited to thirty (30) days of care.

Michigan Medical Service will pay for *Medical* services in hospitals as follows:

(a) 1st and 2nd day	@	\$5.00	=	\$ 10.00
3rd to 120th day	@	3.00	=	354.00
				<hr/>
				\$364.00
(b) Tuberculosis, nervous and mental cases:				
1st and 2nd day	@	\$5.00	=	\$ 10.00
3rd to 30th day	@	3.00	=	84.00
				<hr/>
				\$ 94.00

A copy of the Liberalization Rider, Form 50-76, which is provided to each contract holder appears at the end of this article.

Every doctor in the state received a copy for his files.

There were at July 31, 1949, 65,540 persons covered by the Medical-Surgical contract. On July 31, 1948, there were 29,446 persons with medical-surgical protection. Many employer groups have changed to the Medical-Surgical contract during the past months and it is anticipated that this trend will continue as other contract holders realize the additional protection provided. On July 31, the total number of persons covered by Michigan Medical Service contracts was 1,440,654.

## BLUE CROSS COMMUNITY ENROLLMENT

Community enrollment activities have done much to create a better understanding of Blue Cross among civic and business leaders, as well as other local residents of the communities in which campaigns have been completed so far.

For example, during preliminary contacts in a community several opportunities arise to show exactly how the doctors in hospitals operate Blue Cross as a non-profit public service and that it is their voluntary answer to compulsory health insurance. In other words, to obtain news coverage, a location for campaign headquarters and, also, permission to display banners, etc., local newspaper editors, radio station managers, city officials and representatives of various clubs want to be

(Continued on Page 1214)

### MEDICAL SERVICE RIDER

**THIS IS IMPORTANT TO YOU—PLEASE READ THIS NOTICE CAREFULLY  
ATTACH THIS LIBERALIZATION NOTICE TO YOUR  
MEDICAL-SURGICAL CERTIFICATE**

**Effective September 1, 1949**

In accordance with general condition No. 19 of the certificate, until further notice, Michigan Medical Service will provide additional service or benefits for medical services under paragraph 2(b) of the certificate, as follows: for medical services (not related to surgical or maternity service) other than that rendered concurrently with post-operative services, and except medical services for tuberculosis or nervous or mental conditions, limited to a total of 120 days of such service between the effective date of the certificate and the first anniversary thereof or during any succeeding 12-month period, rendered by the doctor of medicine in charge of the case.

Medical services rendered by the doctor in charge of the case (not related to surgical or maternity service) other than that rendered concurrently with post-operative services, for tuberculosis or nervous or mental conditions, shall continue to be limited to a total of 30 days of such service between the effective date of the certificate and the first anniversary thereof or during any succeeding 12-month period.

Determination of Michigan Medical Service as to whether or not services are medical, surgical or related, or are for tuberculosis or nervous or mental conditions shall be conclusive.

All other terms and limitations of the certificate shall remain in full force and effect.

MICHIGAN MEDICAL SERVICE  
Jay C. Ketchum  
Executive Vice President

Form 50-76

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# BLUE CROSS COMMUNITY ENROLLMENT

(Continued from Page 1212)

shown detailed facts about Blue Cross and why it is the best plan of health protection available to their local residents.

Then together with the help of such civic and business leaders, the general public learns about Blue Cross values through the active assistance of doctors, hospitals and their auxiliaries who publicize the campaign by distributing Blue Cross literature, making announcements at local club meetings and in various ways urging their friends to obtain Blue Cross protection.

At the request of some of our friends we are installing the latest Sanborn Electrocardiograph Machine.

The results will be interpreted by a well known heart specialist.

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## Physicians' Service Laboratory

Reg. No. 26

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	Per cent of Counties Total		Population	Per cent of Total
Completed	35	42.17	1,726,443	32.85
Scheduled	9	10.84	428,362	8.15
Not Scheduled	16	19.28	2,866,272	54.53
*No Par Hospital	23	27.71	235,029	4.47
	83	100.00	5,256,106	100.00

\*The "No Par Hospital" shows the number of counties in which we do not have participating hospitals and, therefore, unable to schedule campaigns, according to the Insurance Commissioner.

Results of campaigns so far shows that our activities, plus splendid assistance by district managers, has obtained a substantial increase in the number of enrolled groups. Likewise, it has helped materially in adding medical surgical plans to existing groups.

The following table shows the number of counties in which campaigns have been completed or scheduled and the population of such counties.

Campaigns in Wayne, Macomb, Genesee and Oakland Counties are not proposed at this time because the \$7.00 Hospital room allowance under the Michigan Hospital Service contract is far below the average room charge in these counties. However, a revision of this feature of the Michigan Hospital Service contract is under discussion.

Telephone  
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2-7790

## HACK'S FOOT NOTES

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Published by the Hack Shoe Co.

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Established 1916

Detroit 26, Michigan, October, 1949

Our 34th Year

### WHAT SIZE SHOES DO YOU NEED?

Hack Shoes for men are in Stock to Size 14

AAA—EEEE

Can we fit you?

# THE HIGH-PROTEIN INFANT FOOD



The incidence of mild protein deficiencies in children, predisposing toward infections and edema, is reported<sup>1,2</sup> much greater than generally realized. Infant and adolescent requirements—not only for tissue repair and maintenance, but also for growth—are much higher than in adulthood.<sup>3</sup> To insure adequate protein intake in infancy, DRYCO—Borden's high-protein infant food—is ideally suited as a basis for formula building. It furnishes *all the essential amino acids*. Its low fat content minimizes gastro-intestinal upsets due to fat intolerance, while its intermediate carbohydrate content lends itself for prescription with or without added carbohydrate. Quickly soluble in cold or warm water, DRYCO contains adequate vitamins A, B<sub>1</sub>, B<sub>2</sub> and D, plus essential milk minerals.

References: 1. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:442, 1936.  
2. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:452, 1936.  
3. Sahyun, M.: *Am. J. Dig. Dis.*, 13:59, 1946.

**BORDEN'S PRESCRIPTION PRODUCTS DIVISION**  
350 Madison Avenue, New York 17, N. Y.

In Canada write The Borden Company, Limited  
Spadina Crescent, Toronto.

DRYCO is made from spray-dried, pasteurized, superior quality whole milk and skim milk. Provides 2500 U.S.P. units vitamin A and 400 U.S.P. units vitamin D per reconstituted quart. Supplies 31½ calories per tablespoon. Available at all drug stores in 1 and 2½ lb. cans.



*The "Custom Formula"  
High Protein Infant Food*



# PR In Practice

## "It's No Bargain" Added to List of Available Pamphlets

September saw the publication of a pamphlet written by and for the women of Michigan—and the nation. "It's No Bargain" is an attractively illustrated and well-written eight-page booklet dedicated to the premise that socialized medicine is no bargain at any price.

Copy for this newest MSMS publication was prepared by Mary Sheets, formerly Public Relations Director for the National Broadcasting Company in Washington, D. C. An ex-newspaper woman with the *Lansing Journal* and the *Cincinnati Post*, Mrs. Sheets also served as special assignment writer for NBC during the war. At present she resides in Lansing where she is doing free lance writing for several national magazines.

Frank Williams, eminent cartoonist for the *Detroit Free Press*, is responsible for the excellent cartoons which decorate the pamphlet pages.

Copies of "It's No Bargain" may be obtained by writing the MSMS Public Relations Office, 2114 Olds Tower, Lansing 8, Michigan.

## Georgia Inspects MSMS Public Relations Program

Mr. E. L. Bridges, Atlanta, newly appointed Public Relations Director for the Medical Association of Georgia, spent a day recently inspecting the various activities of the Michigan State Medical Society.

Georgia's interest in the Michigan plan is indicative of the response our extensive public relations program is receiving throughout the country. Mr. Bridges was referred to Michigan by the AMA and during his brief stay he stated he picked up many pointers that will be of value in establishing a P.R. program in the Southern state society. He showed particular interest in the motion picture and radio program, and was particularly impressed with the C.A.P. Program.

## Doctor, Doctor— How Did Your Pamphlets Go?

The renewed activities of the CAP program for the autumn months have created increased demands for many of the materials available for distribution to lay persons.

"It's No Bargain," new booklet intended for women readers, is off the press and available for requisitioning along with those previously developed by MSMS and the AMA.

Please check your materials so that you can reorder from the list printed below. Direct your

requests to the MSMS, 2020 Olds Tower, Lansing 8, Michigan.

### Materials Available in Unlimited Quantities

- No. 17 *Government Medicine in New Zealand*—A. Lexington Jones, D.D.S., M.D., of New Zealand. (Its social, economic, and political implications.)
- No. 18 *Compulsory Health Insurance*—This is the first of the AMA pamphlets and is on the order of "Uncle Sam, M.D."
- No. 23 *American Medicine Answers President Truman*—Elmer L. Henderson, M.D.
- No. 24 *The Voluntary Way Is the American Way*. Fifty questions and answers.
- No. 25 *Your Medical Program . . . Compulsory or Voluntary?* A comparison of compulsory and voluntary health insurance.
- No. 26 *It's No Bargain*. This is slanted to the woman reader and is intended as a shopping guide for voluntary vs. compulsory health insurance.

### Materials Available in Limited Quantities

- No. 1 *Analysis of the Ewing Report*—J. S. DeTar, M.D., Milan, Michigan.
- No. 2 *Uncle Sam, M.D.* Shows socialized medicine as an economic threat.
- No. 4 *Brookings Institution Report Conclusions*. Results of an unbiased survey.
- No. 5 *Doctor My Statistics Feel Funny*. Analysis of draft rejection figures.
- No. 6 *Socialism, A Politicians Paradise*—Henry J. Taylor.
- No. 7 *A Step in the Wrong Direction*—Dorothy Thompson.
- No. 11 *Michigan's Progressive Voluntary Health Program*—H. W. Brenneman.
- No. 12 *Porter on Health Insurance*. Reprint from the *Cleveland Plain Dealer*.
- No. 16 *The 12 Points of the AMA*.
- No. 19 *Forcing Socialized Medicine on America*—Hon. Forest A. Harness. Address telling of the use of Federal employes and funds to further the cause of socialized medicine.
- No. 21 *Pickpocket Medicine*—John L. Bach.

The large and small posters of "The Doctor" are also available in limited quantities.

## Introducing Your PR Field Secretaries

The inception of the CAP program brought with it the need for additional professional public relations personnel to work with members of the medical profession throughout the state. In the months that have passed since they first began

(Continued on Page 1218)



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## **PROFESSIONAL MAN . . . . .**

### ✓ **CHECK** *these Features*

- Lifetime benefits starting from 1st day of sickness or accident.
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- Covers all accidents except private flying — you are covered on the airlines.
- All accident benefits are doubled if you are injured while riding as a fare-paying passenger on a train, streetcar or bus.
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**WRITE TO  
PROFESSIONAL  
DEPARTMENT  
FOR  
INFORMATION**



## Introducing Your PR Field Secretaries

(Continued from Page 1216)

their travels, many of you have become acquainted with the new members of the MSMS staff. Due to a combination of circumstances, however, some of you may not have had the occasion to personally meet them. In order that you may become better acquainted, we are re-introducing them through the columns of THE JOURNAL.

**Russell Staudacher**



Associate Public Relations Counsel and Public Relations Field Secretary for Central Michigan, Russell Staudacher comes to MSMS from Saginaw. Mr. Staudacher, thirty-four years old, is a graduate of Alma College where he majored in History, English and Education. During his college years he served as Public Relations Director for the College as well as writing for the three news wire services, AP, UP and INS.

Following college Mr. Staudacher worked in advertising and sales promotion activities until the start of World War II. He entered the Air Force as a private in 1942 and left the service as a Major in 1946. During his military career he acted as Public Relations Officer with the Air Force in the European Theater and in 1946 witnessed the atomic tests at Bikini in the same capacity.

Following his discharge, he was employed as advertising manager for a weekly paper. In 1947 he accepted a position as Field Representative of a Public Relations Counseling organization in St. Louis, Missouri, leaving this position for his employment with MSMS.

**John Guy Miller**



John Guy Miller, Public Relations Field Secretary for Wayne County and the Eastern half of Michigan is a native of Missouri. Mr. Miller, thirty-three, is a graduate of the University of Missouri where he majored in English and History.

Following graduation Mr. Miller entered the teaching profession, leaving that field in 1939 for a term of employment with the Equitable Life Insurance

Co. of Iowa. Immediately prior to the war he was Operations Engineer for several construction projects in his native state.

John Guy Miller entered military service in 1942 as a private in the Marine Corps. After much overseas duty Miller was discharged with the rank of Captain in the Reserve Corps.

Journalism next occupied Mr. Miller's time as he edited a weekly legal newspaper in Ferguson, Missouri. He left the publishing field to become Field Director for a nationally known public relations firm from which position he entered the medical public relations field for MSMS.

**Stuart Campbell**



Stuart ("Scotty") Campbell who covers the Western and Northern areas of Michigan for the MSMS is a native of Iowa. Mr. Campbell came to Michigan directly from a position as Public Relations Director with the Nebraska Blue Cross and Blue Shield Plans.

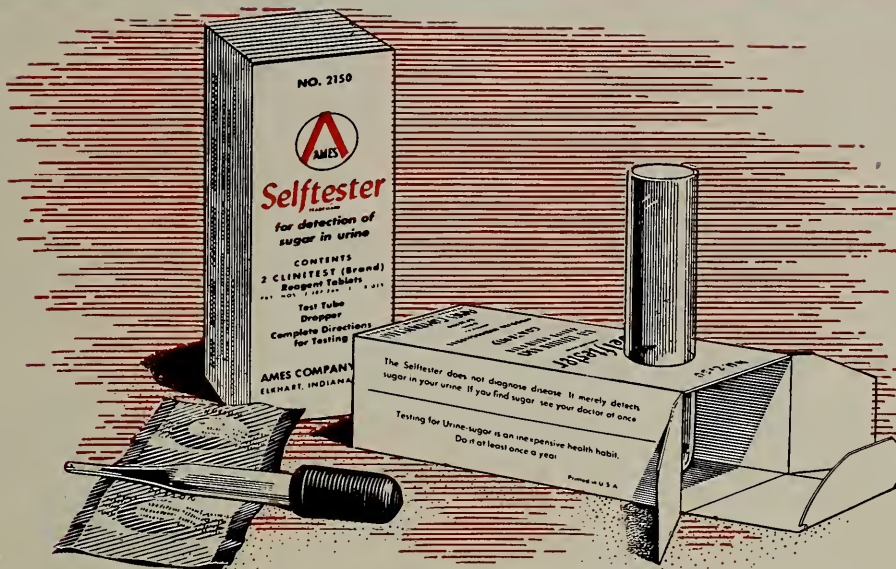
Mr. Campbell, forty-six, attended Kansas University where he majored in Business Administration. Employment in the years following college included several years in the Securities Department of a Topeka trust company and five years as district representative for a national fire and casualty insurance company.

Mr. Campbell has extensive experience in the medical-socio-economic field, having directed enrollments in the Kansas Blue Cross Plan before leaving to work with the same plans in Nebraska. Mr. Campbell is married and has two children.

## Editorial Bouquets

Leadoff position in this month's column goes to many physicians who gave time and energies to bring about the defeat of the President's Reorganization Plan No. 1 and several other measures before the Congress . . . some of the workers reported to this office as doing outstanding work were S. W. Hartwell, M.D., Muskegon; C. B. Gardner, M.D., Lansing; E. C. Texter, M.D., Detroit; C. E. Umphrey, M.D., Detroit; Harold B. Fenech, M.D., Detroit; C. A. Payne, M.D., Grand Rapids; A. L. Arnold, M.D., Owosso; R. C. Pochert, M.D., Owosso; K. H. Johnson, M.D., Lansing; L. C. Harvie, M.D., Saginaw;

(Continued on Page 1220)



# For the public good

The health and well-being of at least 1,000,000 Americans depends upon their discovery and treatment as diabetics. The American Diabetes Association is directing the year-round Diabetes Detection Drive to find the "1,000,000 unknown diabetics" and guide them to their own physicians for treatment.

## THE AMES **Selftester** (TRADEMARK)

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DRUGSTORES

brings those with glycosuria to you for diagnosis.

A simple home screening test for urine-sugar, the Ames Selftester\* is a new approach to this detection problem. Like the clinical thermometer, it is sold directly to the public through drugstores. Also like the thermometer, it does not give a diagnosis, but only a warning.

### the directions state:

1. The Selftester does not diagnose diabetes or any other disease. Its sole function is the detection of sugar (glucose) or sugar-like substances.
2. If reaction is positive, see your doctor at once. Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell why you show sugar.

THE AMES **Selftester** to detect  
**CLINITEST®** to control  
Brand • Reagent Tablets

} THE DIABETIC

\*Approved by the Council of the American Diabetes Association and accepted for advertising in publications of the American Medical Association.



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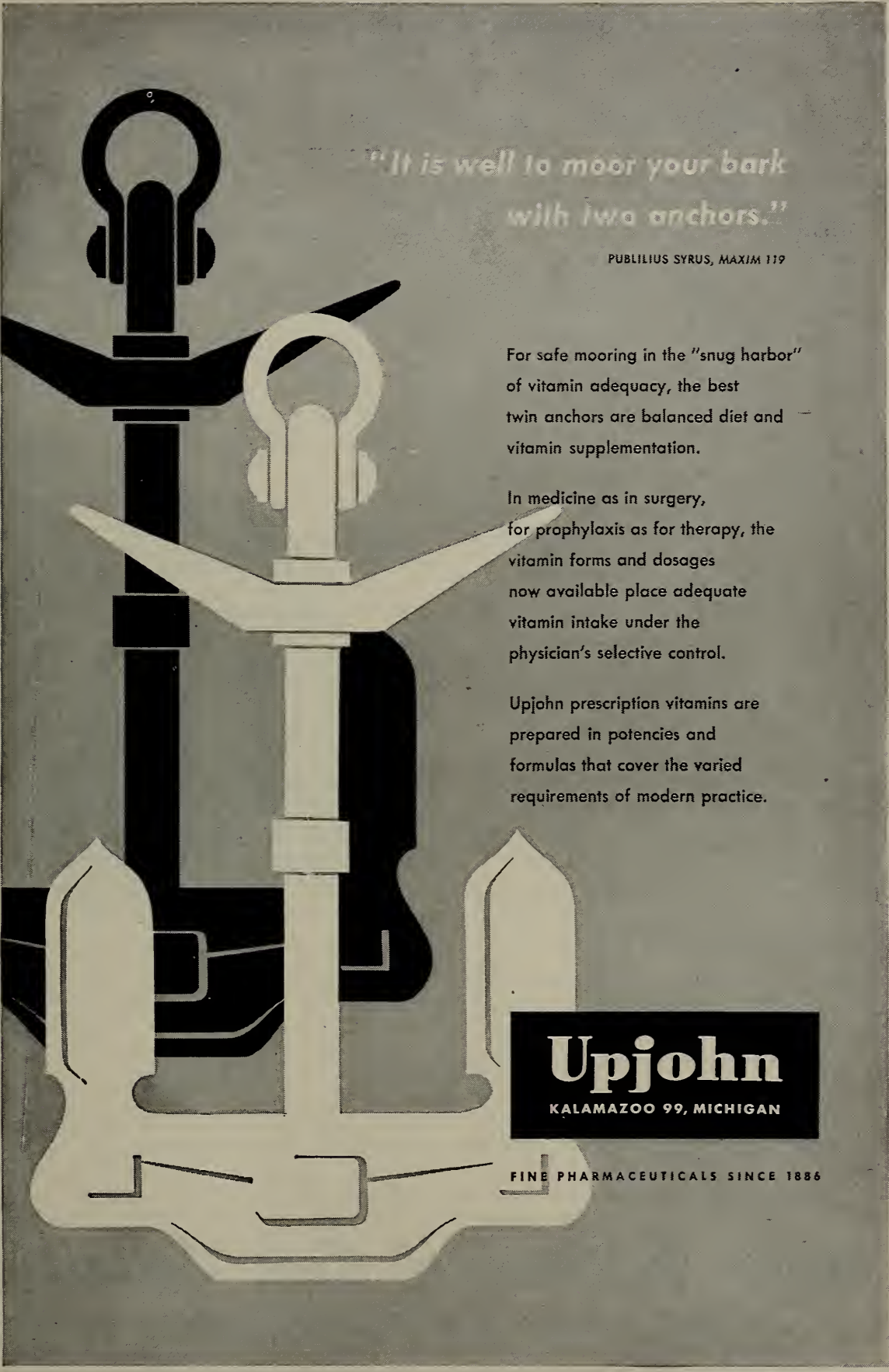
## Editorial Bouquets

*(Continued from Page 1218)*

W. J. Herrington, M.D., Bad Axe; W. E. Barstow, M.D., St. Louis; W. S. Jones, M.D., Menominee; C. A. Paukstis, M.D., Ludington; R. W. Teed, M.D., Ann Arbor; E. A. Oakes, M.D., Manistee; J. D. Miller, M.D., Grand Rapids; P. L. Ledwidge, M.D., Detroit; B. T. Montgomery, M.D., Sault Ste. Marie; E. A. Osius, M.D., Detroit; J. R. Doty, M.D., Lapeer; L. J. Gariepy, M.D., Detroit; E. F. Sladek, M.D., Traverse City . . . The doctors listed above are only a few of the hundreds who took action—and won handsomely . . . Especial mention should be made of the work of Richard D. Mudd, M.D., Saginaw, who drafted and sent an excellent letter to his patients telling of the dangers of plan No. One and asking their support . . . Milan, Michigan, also contributed sixty letters and wires through efforts of J. S. DeTar, M.D. . . . Women in the news include Mrs. R. M. Leitch, Union City, president of the Branch County Auxiliary, whose well-informed speeches about socialized medicine in England (having lived under the system for some time) have been well received. Mrs. Leitch is averaging two speeches a week throughout Southeastern Michigan . . . Still on the feminine side: “honors” to Mrs. R. S. Breakey, Lansing, Auxiliary PR Chairman, for her excellent organizational chart printed in the Auxiliary Bulletin for September and for her work on the CAP program in general . . . Credit Stanley Lowe, M.D., Battle Creek physician, for his speeches detailing conditions in England which he knows first hand and for his splendid work in poster distribution—had window display in local bank window plus others in drug stores, hospitals, etc. . . . Flint’s J. L. Leach, M.D., again must be singled out for his intensive efforts re voluntary medicine at the National Medical Association Convention in Detroit—he has also reported resolutions against socialized medicine from thirty-one negro organizations in Michigan . . . Robert Greenidge, M.D., Detroit, is also congratulated for his work in setting up the booth at the NMA meeting . . . Re Auxiliary—Much of success of women’s CAP work is due to plans of Mrs. W. L. Dixon, Grand Rapids, immediate past president, and Mrs. Don Wright, Flint, new auxiliary leader . . . Wm. S. Reveno, M.D. and H. A. Lichtwardt, M.D., of Detroit appeared on a socialized medicine panel

at Adult Education Council meeting in Battle Creek, October 11. They participated with Frank Woodford, Detroit “Free Press” and Dean Emil Loeffler of Albion College . . . T. S. Conover, CAP Chairman for Genesee County, is planning a CAP Bulletin designed for his entire membership—he is also to be congratulated for his work at the August meeting of the National Medical Association . . . Wayne County Medical Society Speakers Bureau under leadership of J. A. Witter, M.D., is going full “blast”—Requests for speakers are being received daily . . . CAP lost one of its workers when Miss LaRita A. Jones resigned as PR Field Secretary to the Woman’s Auxiliary to marry Mr. Robert H. Brown of Chicago, PR Counsel for the Illinois Central R.R. . . . Our best wishes to the newlyweds who were married “south of the border—down Mexico way.” . . . Dan Cupid also stole the last single girl in the Public Relations office when Betty Brown went Angolaward one weekend and returned as Mrs. Donald Linton . . . C. Allen Payne, M.D., Grand Rapids, and R. A. Johnson, M.D., Detroit, performed nobly as Chairmen of the Press Committees for The House of Delegates and Postgraduate Conference, respectively, at the MSMS Annual Session in Grand Rapids . . . Owosso’s “Perfect Host” came through again as C. L. Weston, M.D., made perfect arrangements for the July meeting of the PR Committee . . . MSMS and the CAP program were brought to Jackson County citizens through an exhibit at their annual Fair—G. R. Bullen, M.D., was in charge of the display . . . Northern Michigan County Medical Society continues its CAP progress “sparked” by energetic G. B. Saltonstall, M.D., of Charlevoix . . . Mrs. William Mackersie, Detroit, has her public speaking talks scheduled as far ahead as January 13, 1950 . . . Outstanding project in Wayne County is the hospital bulletin board program with Roy C. Kingswood, M.D., leading the way with his model setup at Woman’s Hospital . . . There is much more being accomplished than we can show in this brief column—so why not report your new and unusual projects to your CAP leader or PR Field Secretary—in this way the entire state can be made aware of what others are doing to further the CAP program.

L. W. HULL, M.D., *Chairman*  
Special Committee on Education.



*"It is well to moor your bark  
with two anchors."*

PUBLILIUS SYRUS, MAXIM 119

For safe mooring in the "snug harbor" of vitamin adequacy, the best twin anchors are balanced diet and vitamin supplementation.

In medicine as in surgery, for prophylaxis as for therapy, the vitamin forms and dosages now available place adequate vitamin intake under the physician's selective control.

Upjohn prescription vitamins are prepared in potencies and formulas that cover the varied requirements of modern practice.

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# Cancer Comment

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## CANCER EDUCATION IN SCHOOLS

With the beginning of another school year, the problem of what to teach pupils and particularly high school pupils about health comes into prominence. While protection from communicable diseases, sanitation and good personal hygiene practices are important elements of this health teaching, the subject of cancer control should also be prominently emphasized.

In many high school assemblies and classrooms physicians will be called on to discuss health measures. In so doing they should realize that high school students of today have a much broader knowledge of many social and scientific problems than their predecessors of a generation ago. No one attempting to inculcate health knowledge into high school students should underestimate their ability to assimilate scientific information.

The old idea that high school students should not be told anything about cancer because it would only increase their fears of the condition as they grow older has been superseded by the knowledge that such age groups compose the most favorable groups for cancer education. Many of these young folks have had first-hand experience with cancer in their own homes or homes of friends and with their better training in science can grasp simple scientific discussions without difficulty.

All these facts are well known to physicians with experience in talking to high school students individually and in groups.

When cancer is explained to high school students as a biological growth of living cells that have thrown off the influences that control normal growth, the subject becomes a problem in biology rather than in disease. The description of advanced cancer and its ravages has no place in cancer education—least of all in high school health instruction.

As soon as a student knows what a cell is and the part it plays in the organization and functioning of living tissue, he is ready to be told the facts about the nature, cause, treatment and prevention of cancer insofar as they are known today. Being trained in the acquisition of knowledge, students often have a better grasp of this information than do their parents. When presented as a problem involving a knowledge of biology, physics and related sciences, the student approaches the subject as a matter of useful knowledge rather than a sinister thing to be avoided at all cost.

Not only do high school students profit from a knowledge of cancer in their own protection, but many times they influence parents to take action regarding a long-neglected condition that the student has learned to suspect as being cancer.

Physicians often can render a distinct service to their communities by bringing the facts about cancer to high school students. They should willingly participate in high school cancer education whenever invited to do so. When physicians realize that cancer causes more deaths in Michigan each year in children under 20 years of age than do measles, diphtheria, acute rheumatic fever, poliomyelitis, scarlet fever, whooping cough or tuberculosis—and often more than the *combined* deaths from many of these diseases, they will know that there is a great need for cancer education in the younger age groups.

By taking part in this widespread educational effort whenever the opportunity offers, physicians will be rendering a distinct service in the health maintenance program in their own communities.

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Rectal palpation may detect the early, and hence only curable cancer.

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# Editorial Comment

## AGENDA, CONTINUED

Following the plan of last month, we are continuing the editorials from the *Detroit Medical News*, "Agenda."

### Agenda—5

Several accessory phenomena in the problem of the extension of voluntary prepayment plans must be included in the agenda. They are related to the extent of mass coverage necessary or desirable (not equivalent terms) in the extension of medical care. One involves the management of the care of the indigent.

It can be stated that there is general acceptance by the tax-paying public of the responsibility dependent on it to provide medical care as well as other necessities to that portion of its regional population which is no longer self supporting. It may well be that the sole social reform of the new deal years was the recognition generally that there is a segment of the population which is no longer contributory to the area, but dependent in whole or in part on other citizens. It can be said that the liberality of care and other perquisites provided from the tax rolls is greatly related to the social consciousness of the area involved. It is obvious that while there is a variable element of political machination in the operation of such programs, still the indigent receives care related to the level of the area at point, and that there will be considerable variation in what is provided as one compares state with state, county with county, city with city, or entire geographic areas with one another. But these are still equivalent services in relation to the general picture of the regional population group.

Now, with this group in a given area already receiving care from the tax rolls, there is raised the question if it would not be expedient from a fiscal point of view, or better psychologically for the alms-recipient, if he were provided with a policy in some sort of prepayment system, underwritten by the tax unit in question and paid for by the funds already specified for medical care or what-not, in order to give him access to a level of care comparable to that available to the taxpayer or the prepayment insurance premium payer. The more liberal speakers decry the utilization of the "means test" in the determination of need for medical care or other services without recalling that this individual has exceeded any need for the means test and that tax funds are already segregated for him.

Taxpayers generally have seen this shift occur already. Many who would otherwise be pensioners of a local tax unit have now become pensioners of the federal government through the Veterans Administration and the non-service-connected disability, and, with no actual utilization of the means test or other classifying mechanisms, have thus been translated from the financial responsibility of a local to a larger governmental unit. And if this process is to expand, as seems probable, there is

serious question if any voluntary prepayment system needs to go through a complicated gestation in order to include persons who already are, and traditionally have been supported by tax funds.

### Agenda—6

If the voluntary prepayment plan operates at a loss, several things can be said to have occurred. The indemnifying rate is too low for the magnitude of the service provided. There has been an actuarially unpredictable demand for the services offered. There has been unwarranted abuse of the elective procedures provided by the plan. There have been included poor risk, actually unseasoned groups within the participants, increasing the demand for services.

In a recent experience of Michigan Medical Service with the Kaiser-Frazer U.A.W.-C.I.O. contract, the plant has lost a considerable amount of money, despite comment to the effect that the premium payments have exceeded the benefits received, which happens not to be so. Any, and perhaps all of the above factors have been involved in this imbalance. There is always a seasonal imbalance beginning in June, and periods of unemployment have always increased the demands on the plan.

The obvious solution to this problem is the adjustment of rates so that loss will not occur. As things now stand, most prepayment plans are offering indemnification rather than coverage for services provided for the reasons cited in earlier articles in this series, but principally because the fee schedule and the premium rate have not followed the upward advance of the cost of other commodities. Loss in the voluntary system does not permit the type of adjustment possible when tax funds are available as the amortizing agency.

WILLIAM BROMME

### "PHYSICIANS—WAKE UP!"

It is much later than it should be for the individual physician to realize, to have burned into his soul, as it were, that he is in reality two persons in one. He is first a physician, a member of a great profession, legally entrusted with the care of the sick, and, second, he is a citizen of these great United States.

One is as important as the other. If he neglects to exercise his functions as a citizen, here and now, he might, in the not distant future, wake up to find himself not only without rights as a citizen, but also, at the same time, a paid clerk of a bureaucratic government. His great profession, with its ideals and ethical standards, will be but a memory, and his position will be one without honor—without dignity.

A group of moral teenagers are endeavoring to  
(Continued on Page 1226)

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**"PHYSICIANS—WAKE UP!"***(Continued from Page 1224)*

entrap us by misinterpreting the maxim that "the common good has priority over the individual good." Their emotions are unbuttoned, and they have but a slight acquaintance with the commandment, "Thou shalt not bear false witness."

The physician as a citizen should fight for the right interpretation of the above maxim: That, in matters of health, he best serves the common good who has the liberty to advance and improve the present system of practice. No one knows as well as he what the common good is in this regard. No one knows better than himself the evils that would follow the regimentation of his beloved profession. He, himself, would be transformed from a physician into a filler of blanks, and his ability to devote himself wholeheartedly to his patients would come to a sudden stop.

Far above this, the patient would be an even greater loser.

The combating of this impending evil cannot be shifted by the physician to the AMA, or to his state or county society officials—although these should have his complete support and co-operation.

This is a personal problem of every physician in the United States. This is a patriotic duty. If he has never been in a fight before, he is in one now, whether he knows it or not, and it is a fight to the finish.

If he knows the enemy is advancing along a road that leads directly to everything near and dear to him, he should not ask any one to carry his rifle!

Physicians—wake up!

—Editorial, *New York State Journal of Michigan*, Sept. 1, 1949.

**THE VOLUNTARY APPROACH TO HEALTH INSURANCE**

Obscured by much of the propaganda circulated to bolster the cause of what opponents call "the welfare state," voluntary health insurance in the United States has been making spectacular though largely unheralded strides in the last decade.

Figures from the health insurance council of the Institute of Life Insurance show that well over half the labor force of the nation today has some form of group benefits under voluntary plans to protect them from loss of income due to disability. The figure is 33,410,000 workers, an increase of 2,186,000 in 1948 alone.

This is but one phase of voluntary health insurance. Two out of every five Americans have voluntary protection against costs of hospital care.

One in four has similar insurance against surgical expense.

It was only in 1930 that Blue Cross organizations first made their appearance, with hospital expense coverage. Insurance companies entered the field on a group basis in 1934. The first surgical expense insurance was offered 11 years ago and medical care nine years ago.

It is medical expense insurance that is growing most rapidly. Coverage increased 45 per cent in 1948 to embrace 12,895,000 Americans.

There can be little doubt of the growing public acceptance of the idea that hospital, surgical, medical and lost-income aspects of the cost of good health can be insured to good profit for the individual, the family and the state as well.

The biggest problem in the whole voluntary undertaking is rising costs of such care. Like most every other goods and service in growing demand in the war-years and the postwar era, voluntary health insurance was and is subject to inflationary factors.

But so is state medicine.

The problem in the state of Washington, with a widened social security program incorporating health for the aged, affords a dramatic example. There in Washington a program that has been operating only since January has already threatened that state with bankruptcy. Costs of medical care have doubled under the program.

For those who cry the wares of the welfare state, the experience of Washington state should be a warning. On the other hand, progress made in voluntary plans, for all the rise in costs of the care afforded, should make it apparent that a growing voluntary program, based on the economic capabilities of the insured, provides a more solvent foundation on which to build than does the welfare state idea—so dramatically shown up in Washington state, and in England.—Editorial, *Battle Creek Enquirer News*, August 18, 1949.

**AS WE SEE IT**

Having refused President Truman's request for a new department which would include welfare, health and education and be headed by a Cabinet officer, the Senate changed course and accepted two other reorganization plans.

They involved the transfer of certain bureaus to new department jurisdictions. Four other executive department changes will occur automatically.

*(Continued on Page 1263)*

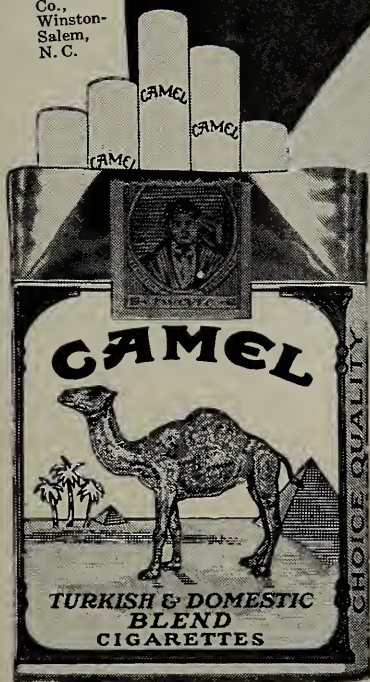


30-DAY TEST REVEALED

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# Political Medicine

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## AMERICAN LEGION AGAINST SOCIALIZED MEDICINE

The American Legion and the Legion Auxiliary, at their national conventions in Philadelphia this year, reaffirmed the stand taken annually since 1945 by adopting a strong resolution against Compulsory Health Insurance.

The Legion, with a National membership of 3,500,000, and the Legion Auxiliary, composed of more than 1,000,000 women, passed the following resolution:

WHEREAS, the American Legion has always had as one of its objectives to foster and perpetuate a 100 per cent Americanism and to safeguard our liberties and freedoms as opposed to any form of compulsion and regimentation, and

WHEREAS, there is now before the Congress of the United States the question of Compulsory Health Insurance which in itself is a threat to our freedom, now

THEREFORE, be it resolved by the American Legion in National Convention assembled August 29-September 1, 1949, in Philadelphia, Pennsylvania, that this organization go on record as opposing any form of Compulsory Health Insurance.

## FREE MEDICAL CARE IN ENGLAND FACES CUT IF U. S. REFUSES AID

Britain may have to limit her social services if next month's monetary talks in Washington flop, according to an informant close to the labor government.

The informant, who refused to be identified, said labor leaders might have to start retrenchment by dropping the government's free medical services, if the dollar-pound talks fail.

### Fourth of Budget

Britain's social services, together with food subsidies, cost one-quarter of the country's whole annual budget of \$12,000,000,000.

Britons now can call on doctors without paying fees under the 13-month-old national health service, though each pays up to six shillings, eight pence weekly (\$1.33) to help support it.

If the Washington parley fails, the informant said, British leaders may have to consider having each person pay a shilling (20 cents) for each visit.

He explained that the calls on the service have far exceeded advance estimates and, if Britain might tighten her belt, she cannot go on spending so much on the service out of general taxation.

### Hold Up Decision

The source said laborite leaders are waiting until the Washington talks are over before deciding whether to call a quick election this year, or carry

on until near the end of their five-year term next July.

He disclosed this as Paul G. Hoffman, American head of the European Co-operation Administration, began talks with British officials before the Washington parley September 7.

The informant said the government expects its gold and dollar reserves to sag more than one-fourth by September 30—down to \$1,200,000,000.

At the end of June, Britain was down to her last \$1,624,000,000. The treasury's goal had been to keep the reserves at a "safe" margin of \$2,000,000,000.

The informant said Britain's balance-of-payments position for the current quarter looks "very grim" despite rigid import cuts.

## HATER OF SOCIALIZED MEDICINE THINKS HIGH FEES WILL BRING IT

To the Editor: There is a great deal of controversy today as to socialized medicine. Perhaps you may be interested in the opinion of a "Mr. Average Workingman." Then again you may toss this in the proverbial waste-paper basket. So here goes for better or for worse.

Personally, I do not like socialized medicine. I do not relish having the politicians dab in our health or lack of it.

But socialized medicine is inevitable unless professional men adjust their fees to fit the common man's pocket book. Do they not see the handwriting on the wall?

We, the common workers, are being gouged unmercifully. Why, the average hospital bill looks like the bill for Rita's dowry.

To have babies is really a luxury, for between the Doc and the hospital they will roll you for \$150 to \$200. Try and see!

Oh, what about the dentist? Well they sure can extract more than teeth. They can clean out your billfold faster than a collie pup can lap up milk.

So, I just say personally I have no grudge against you professional boys, but how long do you expect the gravy train to be? If Uncle Truman and his boys get their hooks into all of us, then please don't cry on our shoulder. You brought it on yourselves.—ED ADAMS, *Detroit Free Press*, August 21, 1949.

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## SOCIALIZED MEDICINE

We are opposed to socialization of business or of our professions by the Government, and we strongly oppose any plan to socialize medicine.—Battle Creek Chamber of Commerce, June 28, 1949.

# The JOURNAL

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## Clinical X-Ray Conference on Lesions of the Colon

By Benjamin R. Van Zwalenburg, M.D.,  
Lynn A. Ferguson, M.D., and  
Edward F. Ducey, M.D.  
Grand Rapids, Michigan

THE FOLLOWING cases are presented to illustrate some of the more interesting diagnostic entities and to show some problems of diagnosis or management recently encountered. With one exception, the cases deal with lesions above the rectosigmoid junction. Lesions of the rectum are not included in this presentation because they do not properly belong in the field of x-ray diagnosis. Such lesions may often be found by radiographic means, and x-ray examination of a known rectal lesion may be of help to the surgeon by indicating its size and position, but it must be recognized that the accuracy of roentgenologic diagnosis falls off very rapidly below the rectosigmoid junction. The barium enema cannot be relied on for the exclusion of pathologic conditions in the rectum or even, sometimes, in the rectosigmoid flexure. It follows as a natural corollary that every patient who is referred for x-ray examination of the colon should also be subjected to sigmoidoscopic and digital examination.

Increasing experience indicates that the converse of this principle is also true, that all patients of middle age or older who present rectal bleeding or change in bowel habit should be examined by barium enema even though clinical examination of the anus and rectum has already demonstrated a possible cause of the symptoms. The three

methods of examining the colon—digital, sigmoidoscopic and roentgenologic—are not competitive because each examines a different portion of the colon. Therefore, every patient presenting symptoms of colonic abnormality should be examined by all three methods.

Full use of microscopic control is, of course, essential, both for management of the patient and for guidance in the development of clinical diagnostic skill.

### Case Reports

*Case 1.*—C. A., a boy, aged two and a half, had recent rectal bleeding. Proctoscopy was negative except for petechial hemorrhages in the lower rectal wall, indicating moderate anorectal prolapsus due to straining. ♦

Rectal bleeding in a child places upon the roentgenologist the responsibility of finding or excluding polyp of the colon. This may be extremely difficult. Good preparation is essential, and careful fluoroscopy and filming are needed. Too great reliance should not be placed on a negative report in this situation, as it is not uncommon to find the lesion only after two or more examinations have been made.

Polyp of the colon is revealed by barium enema as a rounded filling defect within the lumen of the colon. Proof of constancy of size and position is necessary because such a shadow may also be produced by a round fecal mass. This group of films (Fig. 1) showed a shadow in the same portion of the descending colon in each of three different situations: with barium filling, after evacuation of the barium, and after injection of air. In addition, it was seen fluoroscopically and could not be manipulated out of position. This case, therefore, fulfills the criteria for roentgenologic diagnosis of solitary polyp of the colon. Sometimes the lesion can be seen in only one of these three types of film, and then recourse must be had to re-examination in order to rule out artifact produced by fecal material.

The air film also reveals the characteristic clumping of the barium on the surface of the lesion.

Operation consisted of sigmoidotomy with complete removal of the polyp.

The surgical specimen was a mushroom-shaped polyp, 16 mm. in diameter, possessing a well-defined stalk, which had normal colonic mucosa attached to its base.

From the Ferguson-Droste-Ferguson Rectal Clinic and Hospital, Grand Rapids, Michigan.

Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, at Detroit, March 23, 1949.



Microscopic section through the center of the polyp revealed malignant cytologic changes in the gland epithelium but no break in the basement membrane or loss of cell polarity.

The problem was nicely explained by further sigmoidoscopy which revealed that the polyp was on a very long pedicle and had a free range of motion from the rectal pouch to the upper sigmoid.

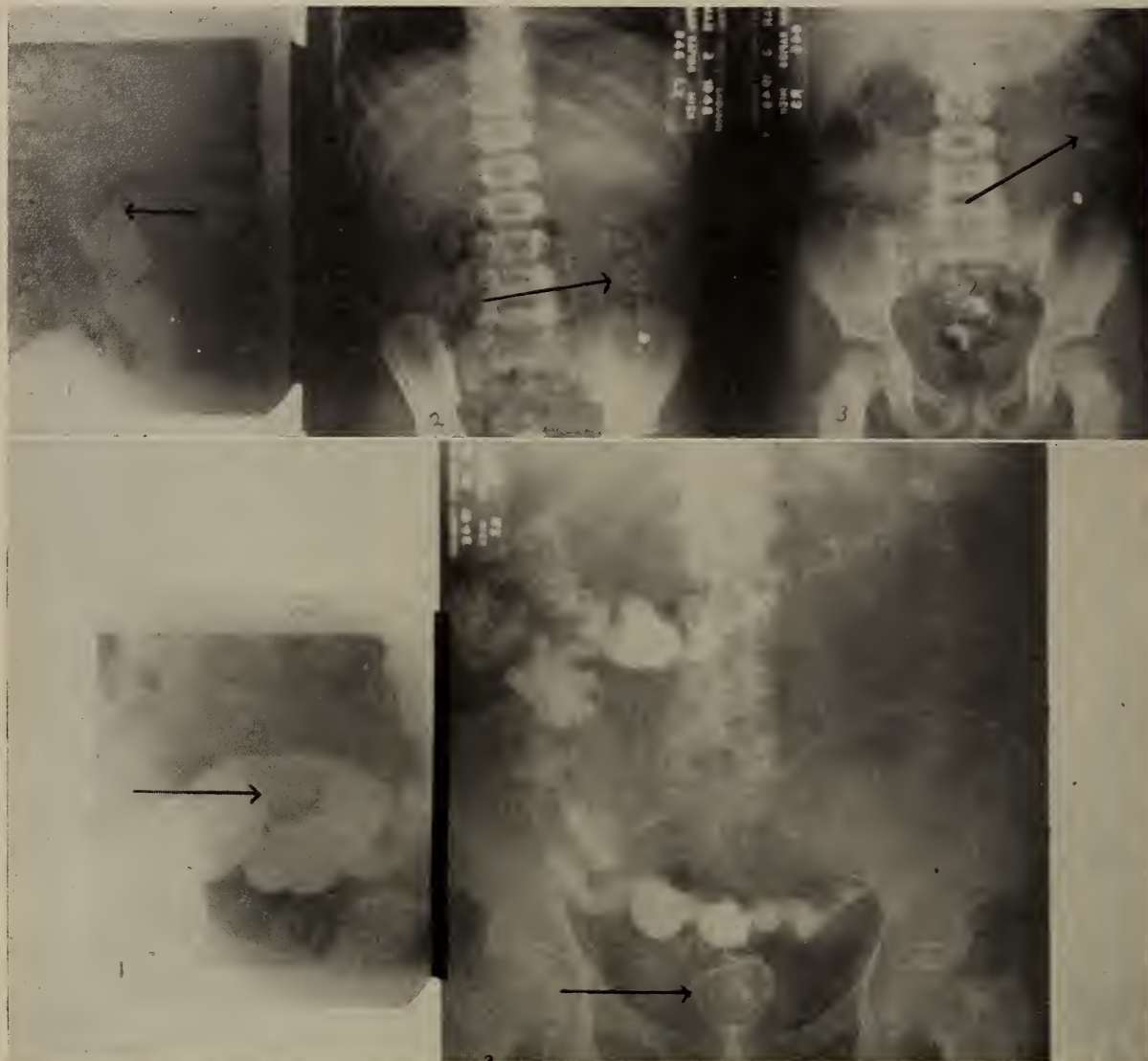


Fig. 1. (above) Case 1. Barium filling, post-evacuation, and air filling films.

Fig. 2. (below) Case 2. Barium filling and post-evacuation films.

*Case 2.*—C. B., a woman, aged sixty-four, had long-continued rectal bleeding, protrusion at stool and sense of fullness in the rectum. With some difficulty, a polypoid type of neoplasm was seen high in the sigmoid and biopsied.

The x-ray findings in this case were baffling (Fig. 2). The radiologist knew before the examination that a large polyp had been found by sigmoidoscopy, but in spite of this, he was not able to demonstrate a constant filling defect at the fluoroscope or in films. The film made after injection of air showed a non-opaque filling defect in the mid-sigmoid region, but in the post-evacuation film, the sigmoid portion of the colon was entirely free of any such mass, and the only possible area of abnormality was in the lower rectum.

Because this was a solitary polyp on a long pedicle, it was removed from below. It was carefully drawn down, clamped, and the base securely sutured. Many polypi with long pedicles can be removed in this manner or with the electric snare, thus avoiding a laparotomy and sigmoidotomy. Recovery was uneventful.

The resected polyp had a body 26 mm. in diameter and a long pedicle, the gross appearance being very similar to that described in Case 1. Microscopically, the picture was much the same except for commencing invasion of the stalk by proliferating epithelial cells. Because of the latter finding, a guarded prognosis was given.

Examination one year after operation did not show any sign of recurrence.

Case 3.—J. W., a girl, aged twelve, had had repeated episodes of sharp cramping pain in the lower left quadrant during the preceding three months, accompanied

and was much smaller following sigmoidoscopy. A small polyp was found on the second rectal valve.

The original x-ray examination (Fig. 3) demonstrated

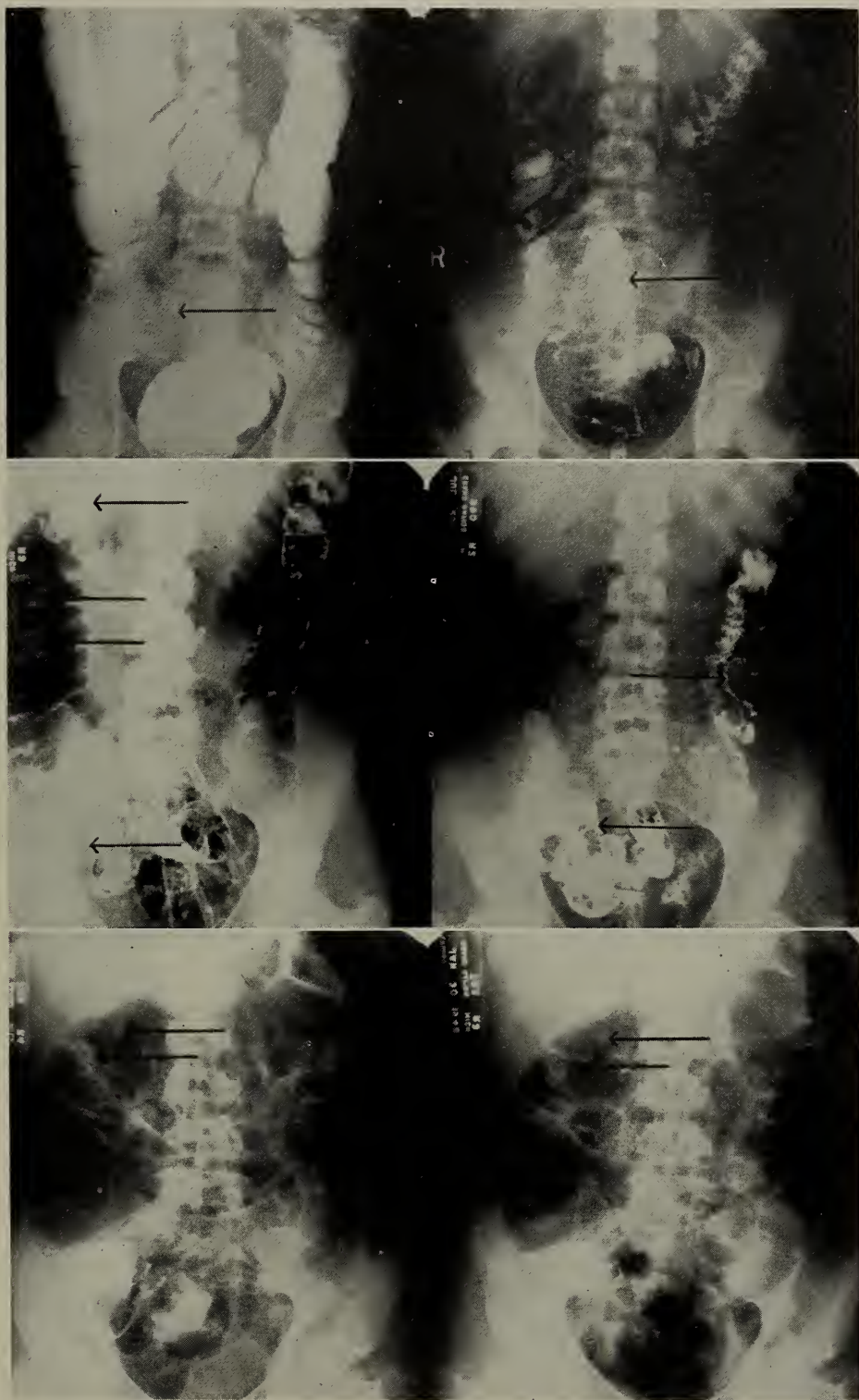


Fig. 3. (above) Case 3. Barium filling and air filling films.  
Fig. 4. (center) Case 3. Air filling and postevacuation films.  
Fig. 5. (below) Case 3. Air filling films.

by nausea and vomiting. A 15-pound weight loss had occurred. Palpation revealed a smooth soft mass in the mid-abdomen. It was variable in consistency and size

the typical transversely striated pattern of intussusception in the cecal region. There was also some suggestion of polypi in the ascending colon.



The abdomen was opened and intussusception of the ileum extending down to the mid-portion of the descending colon was found. The intussusception was reduced and the terminal ileum plicated to decrease chance of recurrence.

During the next three years, the patient had intermittent bleeding, and several rectal polypi were removed and their bases fulgerated. She then showed recurrence of intestinal obstruction.

Barium enema (Fig. 4) revealed polypi in the cecum and, in the double contrast film, in the hepatic flexure and ascending colon. Post-evacuation film was confusing because, just as in the previous case, the filling defects were more distal in the colon than in films made after air or barium filling. Such behavior violates the usual diagnostic rule that the filling defects must be constant in position in all of the exposures. It is due either to movement of the polyp on a long pedicle or to the polypi being dragged caudally during evacuation, producing a partial intussusception.

Right hemicolectomy with ileotransverse colostomy was done. The mucosal surface was studied with innumerable pedunculated polypi, 1 to 30 mm. in diameter; the larger lesions possessed long pedicles, and many of the larger tumors showed surface ulceration and bleeding. Microsection revealed variable degrees of cytologic malignancy without any loss of polarity or breaks in the basement membrane. A few small lymph nodes found in the mesocolon showed inflammatory changes only.

The patient is now clinically well. However, polypi of the rectum and sigmoid have recurred and have been removed from time to time, and it will probably be necessary eventually to remove the remainder of the colon and do an ileosigmoidostomy.

The girl's father (Fig. 5) was found to have polypi of the same area, illustrating the familial incidence of multiple polyposis of the colon.

*Case 4.*—O. B., a man, aged thirty-seven, had experienced diarrhea for the past twelve years, with cramping colicky abdominal pain, typical of large polypi, and with occasional bloody mucus with stools. Proctoscopy showed multiple polyposis of the distal bowel segment. Several selected polypi were removed for examination which revealed malignant change.

The films in Figure 6 illustrate an extreme example of multiple polyposis. Polypi are literally everywhere within the colon. They are of varying size. Each shows a ring of white in the air injection film due to clinging of the barium forming a collar about the neck of the polyp.

Excision and fulgeration of the rectal and lower sigmoidal polypi was done at intervals until it was felt safe to anastomose the ileum to the sigmoid. Eventually the colon was removed in multiple stages, and an end-to-side ileosigmoidostomy anastomosis was accomplished. A sigmoid colostomy was left so that future polypi of the sigmoid and rectum may be attacked both from above and below through the sigmoidoscope.

The specimen was a segment of colon about 40 cm. long, the mucosa of which was studded with pedun-

culated polypi, 1 to 18 mm. in diameter, many of which showed a friable granular surface, sometimes ulcerated. Microscopically all of the polypi showed cytologic malignancy, but in the several sections examined, there was no sign of penetration of the basement membrane or metastatic tumor cells anywhere in the connective tissue of the polyp stalks.

*Case 5.*—F. K., a man, aged thirty-eight, had been hospitalized elsewhere for three months, being treated for severe diarrhea, averaging fourteen stools daily, and repeated massive hemorrhages from the bowel. Several transfusions had been necessary. He had lost 40 pounds and his condition was grave at the time of transfer.

Proctoscopy revealed numerous large polypi throughout the rectum and a stenosing hyperplastic lesion at the rectosigmoid junction, simulating the common type of colon malignancy. Biopsy of this area was reported as "carcinoma in situ" without evidence of invasion.

Films of this patient (Fig. 7) were very similar to those of the last case. The chief distinction is that this case showed filling defects of fairly uniform size and less elevation, producing a cobble-stone appearance of the mucosa throughout the colon. Although it is often possible to distinguish roentgenologically between multiple polyposis and pseudopolyposis secondary to chronic ulcerative colitis, some cases will defy correct differentiation by x-ray findings alone. The clinical history helps us to identify this case as pseudopolyposis.

Colectomy was done, leaving the removal of the sigmoid and rectum for a later stage. After a period of clinical improvement, this was accomplished without difficulty. The cecum was left to provide at least a small reservoir for storage and absorption of water. This will probably necessitate repeated fulgeration of new polypi in the cecum but is much less disagreeable than an ileostomy.

The resected colon was studded with mucosal polypoid elevations, most of which were sessile; both the polypi and the intervening mucosal surfaces were friable, congested, and covered with turbid exudate, while the muscle coat showed definite thickening but no trace of neoplasm. Microscopic section revealed an advanced chronic inflammatory process of nonspecific appearance which had produced deep fissuring of the mucosa, with numerous islands of persistent mucous membrane representing the polypoid masses noted on gross examination; the epithelium of these islands showed inflammatory hyperplasia which in some areas suggested neoplasia, but without any frank carcinomatous changes. The valleys between the polypoid islands were covered by granulation tissue and devoid of epithelium; no amoebae or other organisms could be recognized in the inflammatory zone. The muscle was hypertrophied but not particularly inflamed.

Pseudopolyposis resulting from chronic inflammatory disease may simulate true polyposis quite closely. The history of antecedent colonic disturbance is usually sufficiently characteristic, however, to distinguish between symptoms of mucosal hyperplasia or neoplasia and the syndrome resulting from extensive colitis. The prognosis is likewise quite different, the inflammatory lesions undergoing malignant degeneration in only 2.5

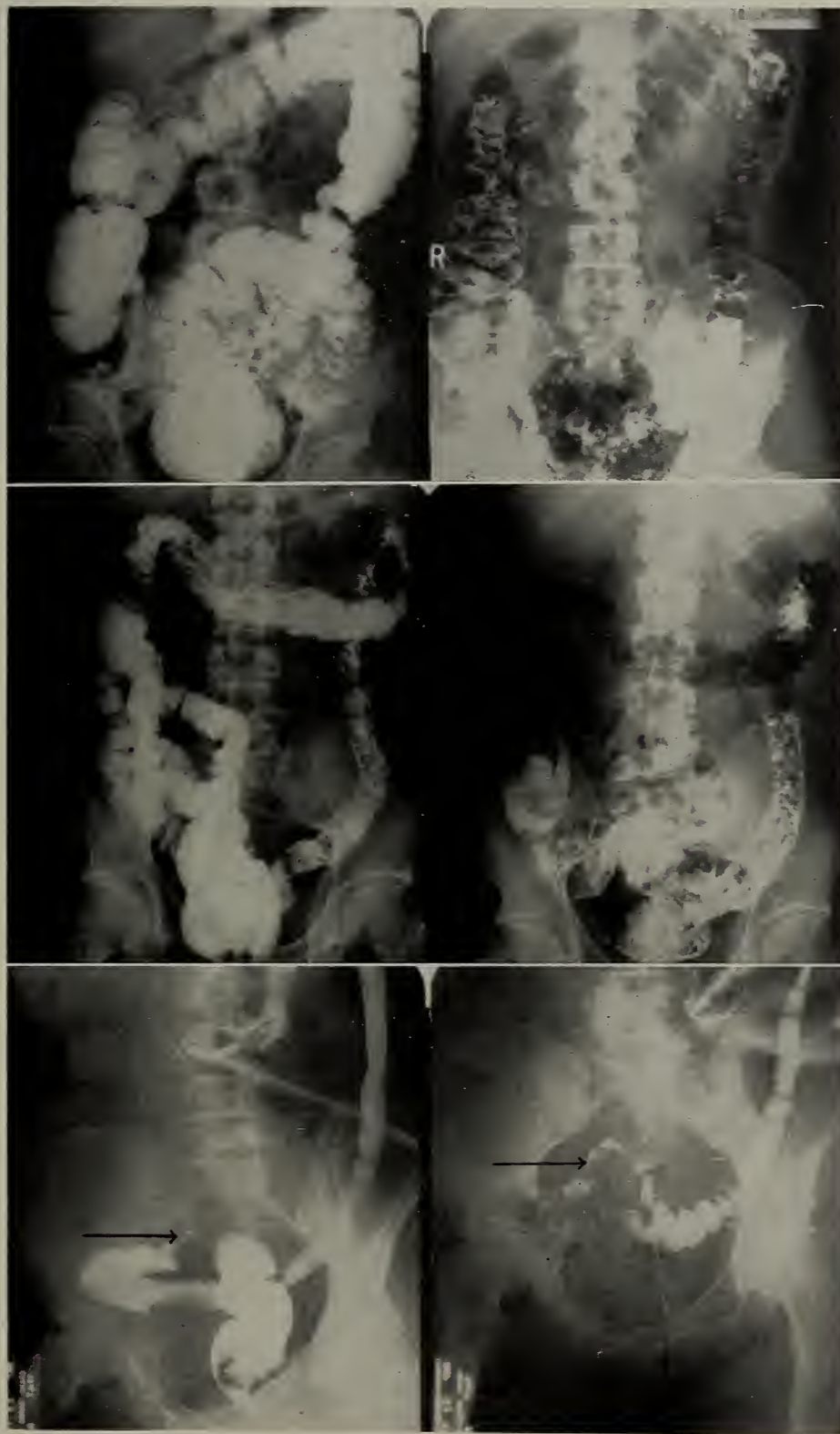


Fig. 6. (*above*) Case 4. Barium filling and air filling films.

Fig. 7. (*center*) Case 5. Barium filling and air filling films.

Fig. 8. (*below*) Case 6. Barium filling and air filling films.





Fig. 9. Case 7. Barium filling and air filling films.



Fig. 10. Case 8. Scout film of abdomen.

per cent of cases, while virtually every victim of true polyposis may be expected to develop carcinoma in one or more polypi.

This patient has gained 84 pounds since operation and is back at full-time work.

*Case 6.*—J. Z., a woman, aged forty-three, was referred with the complaint of dull aching pain in the left lower quadrant, sometimes cramping and colicky. There had been episodes of nausea, vomiting, and signs of obstruction. Thirteen-pound weight loss had occurred. There was no history of menstrual disturbance. Proctoscopy was negative.

Films (Fig. 8) demonstrated an area of constriction in the distal sigmoid colon. The area of involvement was unusually long for neoplasm. The ends of the lesion were abrupt but did not present the typical overhang found in most malignant lesions of this portion of the colon. The radiologist certainly could not exclude the possibility of a primary malignancy, but on the basis of this evidence suggested that an inflammatory etiology was more likely. An appearance which suggests malignant neoplasm but is not entirely typical is often found in the disease which this case illustrates.

A transverse colostomy was done first, with pre-operative diagnosis of malignant tumor of the colon. Exploration at that time revealed very dense adhesions and a large mass in the pelvis. Endometriosis or diverticulitis with inflammatory mass was suspected, but malignancy still could not be ruled out.

In a subsequent operation, the mass was resected with its segment of sigmoid colon. The remaining colon was anastomosed, and total hysterectomy and bilateral salpingo-oophorectomy were done. The transverse colostomy was later closed.

The resected sigmoid segment showed a napkin-ring type of annular thickening extending two-thirds of the distance around its circumference, the center of the lesion being in the mesocolic attachment. Cross section through the lesion showed a definite tumor infiltrating

the muscle wall up to the submucosa, with the mucous membrane still freely movable over the lesion, and apparently intact. The uterus exhibited mural thickening and several typical fibroid tumors, while the adnexa were boggy and their serosal coverings thickened and opaque, with many adhesions. Each ovary contained several chocolate cysts. Microscopically the colonic lesion was a typical growth of aberrant endometrial glands and cytogenic stroma, associated with some benign desmoplasia. The uterus, tubes, and ovaries were involved in a remarkably extensive infiltration by similar endometrial tissue showing more or less secretory activity, sometimes with menstrual bleeding into the lumina. This was a typical endometriosis.

*Case 7.*—T. S., a woman, aged forty, complained of left upper quadrant pain and diarrhea of fifteen years' duration.

Fluoroscopy and films (Fig. 9) demonstrated an irregular, 6 cm.-long area of constriction in the proximal descending colon. As in the last case, the transition to normal-appearing colon at the ends of the lesion was fairly abrupt but without the typical overhang of the napkin-ring primary colonic malignant tumor. The channel through the lesion showed a coarser pattern of irregularity than is common in carcinoma of the colon, suggesting broad flat ridges of tissue. The radiologist concluded that the lesion was "probably a granuloma, a carcinoma or a lymphosarcoma."

Operation consisted of segmental resection of the stenosed area of the splenic flexure with primary anastomosis. A loop of small bowel caught in the mass was also resected, and primary anastomosis was done.

The surgical specimen was a portion of colon 20 cm. long, showing marked thickening of its middle third, at which point it was firmly plastered to a loop of small bowel. Cross section through the two adherent loops revealed a mass of indurated omental fat and a single small central abscess pocket containing green pus; the latter was located opposite the blind tip of a diverticulum

about 1 cm. deep which projected into the mesocolon from the gut lumen, and which showed congestion and apparent necrosis of its distal wall although no actual perforation could be demonstrated. Numerous other

the abdomen, usually relieved by a bowel movement. Appendectomy had been done in 1936. Two years later, she was operated for adhesions, and again after two years for bowel obstruction. Three more operations for ad-

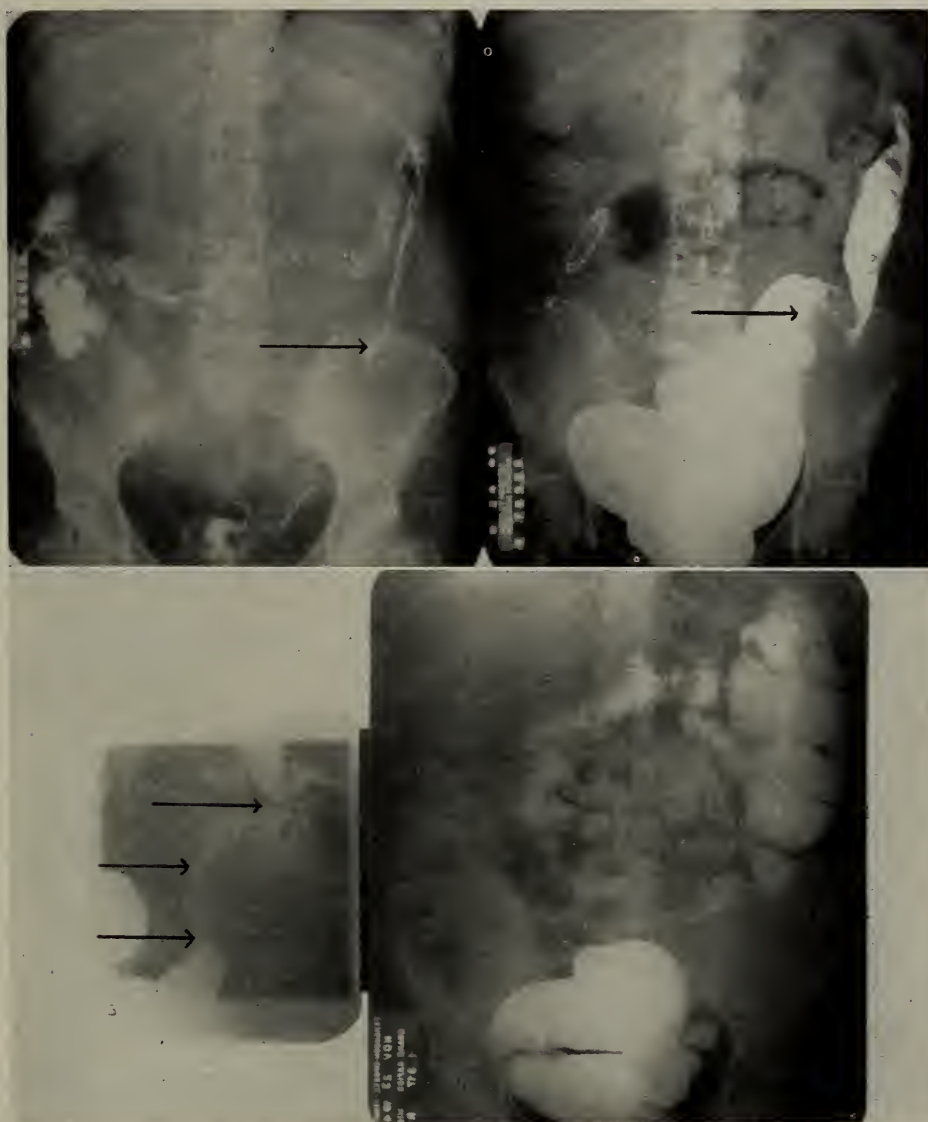


Fig. 11. (above) Case 9. Post-evacuation and barium filling films, made four months apart.  
Fig. 12. (below) Case 9. Barium filling films, six months later.

similar diverticula were scattered along the entire length of the specimen, most of these being located at the site of its mesocolic attachment. No tumor could be demonstrated, either grossly or microscopically; microsection revealed subacute and chronic nonspecific inflammation with one small abscess containing mixed bacteria.

The history, location, and x-ray appearance in this case were all most unusual for a diverticulitis. The situation in the mesocolon and formation of a very indolent small abscess apparently accounts for the unusual findings.

*Case 8.*—H. L. F., a woman, aged twenty-five, complained of constipation and of cramping, colicky pain in

hesions followed at intervals of three, two, and one years. Her appetite was poor and she resorted to daily enemas. She was acutely obstructed, and the situation demanded surgical intervention five days after admission.

A flat plate of the abdomen (Fig. 10) demonstrated large amounts of gas within the ascending, transverse, and descending portions of the colon and within the distal small bowel. The distribution indicated a mechanical large bowel obstruction.

The operation was long and difficult. Numerous loops of small bowel were freed from their adhesive bands and coils. A Miller-Abbott tube was threaded all the way into the cecum. Several small tubercle-like masses were removed for the laboratory. Before closing, a prayer was



offered for some effective substance to put in the abdomen to prevent future adhesions.

A small button of indurated fat tissue, 3 mm. in diameter, was submitted for examination; it was removed from an adhesive band which was obstructing a loop of gut. Microscopic examination revealed only chronic inflammation with some foreign body reaction, until examined by polarized light; the latter disclosed numerous refractile crystalline foreign bodies, 1 to 20 microns in greatest dimension, having the appearance of talc crystals.

The next six weeks were marked by a constant struggle with feeding and elimination. In spite of repeated use of the Miller-Abbott tube for decompression, it became necessary to interfere again or lose the patient. The same arduous dissection was repeated; but this time, the distal end of the tube was brought out through a cecostomy stoma. The tube was left in this through-and-through position for some time, so that as the inevitable extensive adhesions formed, the small bowel would be fixed in the position of the curves enforced by the tube rather than with the usual sharp angulations. She was discharged three weeks later and has now succeeded in getting along without a major episode for seven months.

The increasing importance of this variety of chronic peritonitis is being demonstrated daily since the practice of examining granulomatous lesions by polarized light has become more widely employed. Examination of inflammatory adhesions has demonstrated the presence of this type of foreign material in nearly every case of recurrent bowel obstruction. It evidently is introduced into the abdominal cavity during routine operative procedures. A glove need not be perforated to produce such peritoneal soiling; wash water contains numerous talc particles after it is used once, and several investigators have shown that the outside surfaces of rubber gloves contain a fairly large number of talc crystals which have adhered following the preliminary dusting before sterilization. The only practical solution to date has been the substitution of an organic dusting powder composed of starch derivatives mixed with a small amount of magnesium oxide, which has been shown to be innocuous when introduced into the peritoneal sac. Talc is much more apt to produce severe adhesions if the peritoneum is already inflamed or otherwise damaged at the time of the first operation. Therefore, it is more likely to cause trouble in cases of ruptured appendix or florid pelvic inflammation.

*Case 9.*—E. L., a woman, aged fifty-three, had a history of ruptured diverticulitis of the sigmoid, drained one year previously elsewhere. Transverse colostomy had been done and later closed when the mass subsided. A month later cholecystectomy had been done, and it was reported that exploration showed the mass had subsided. After six months a left lower quadrant abscess had been drained.

On admission, she presented an irregular, firm fixed mass in the left lower quadrant, the size of a small grapefruit. There was rectal bleeding. The patient's general condition was surprisingly good, and there was no net weight loss.

The first two films (Fig. 11), taken four months apart, are shown by courtesy of Drs. Holly and Joistad. A small filling defect was present at the junction of the descending and sigmoid portions of the colon at the time of the first examination. It was not annular, and it presented two pointed lateral extensions of barium, suggesting the necks of diverticula. This film certainly suggests a diverticulitis. The second film showed that an annular filling defect was present, resembling malignant neoplasm.

Six months later here (Fig. 12), the colon was seen to circle around the medial and posterior aspect of a 12 cm. hard left lower quadrant mass. There was much deformity of the colon, largely produced by extrinsic pressure of the mass. Long before the entire colon was filled, barium appeared in several loops of small bowel, indicating a fistula between the large and small bowel. Since this phenomenon appeared at the time the barium reached the area of previous colostomy in the mid-transverse, it was erroneously assumed that the fistula was at this point.

The long history and the large pericolic mass with irregular, nonsymmetrical deformity of the colon, together with the diverticulous points extending from the colon in the earliest film, led us to a diagnosis of diverticulitis with a large pericolic inflammatory mass.

Transverse colostomy was done and the mass explored. It was thought that it might be a diverticulitis; however, because of the density of the adhesions, the question of endometriosis was entertained. Two frozen sections failed to demonstrate neoplasm. As the dissection progressed, it gradually became apparent that a malignancy was present. Subsequently a large mass involving the sigmoid was resected. It was necessary to fractionally resect and anastomose the small bowel five times and, of course, anastomose the large bowel deep in the pelvis. The patient had an uneventful recovery after eight hours of operation. The transverse colon must still be anastomosed and dropped back into the abdomen.

The specimen removed at operation was a mass of intertwined bowel loops estimated to contain about 50 cm. of small gut and 20 cm. of colon; these loops were adherent to one another and to a thick firm mass of congested mesentery which on cross section was found to contain a ragged, multilocular abscess filled with foul pus and some blood. The lesion originated from a neoplastic ulcer in the colonic wall which had eroded the gut and which formed a portion of the abscess lining. From the mesenteric mass, the tumor had grown back through the wall of the colon at several points and had also eroded two loops of small bowel with the formation of small fistulae. Numerous other tumor nodules could be recognized beneath the serosa of the several bowel loops and others were scattered along the perivascular lymphatics of the mesentery. Microscopic examination revealed a well-differentiated adenocarcinoma of colonic origin growing profusely in the wall of the mesenteric abscess and extending in retrograde fashion back into the wall of the colon at several points, where it formed good-sized polypoid masses projecting into the lumen as much as 15 cm. distant from the primary lesion.



Fig. 13. Case 10. Barium filling film.

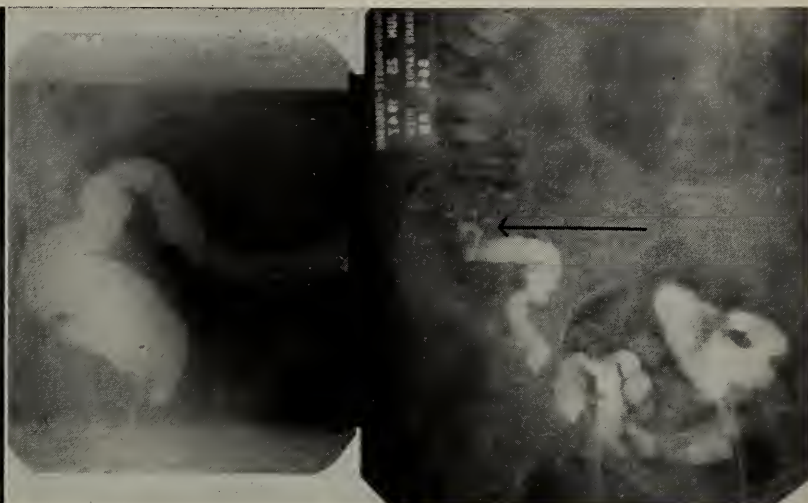


Fig. 14. Case 10. Spot film of rectum. Air filling film of cecum.

The history of slow development with absence of weight loss and the huge pericolic abscess mass were very misleading in this case. The correct diagnosis might have been made preoperatively if more attention had been paid to the fact that fistulas between loops of bowel are rarely seen as a result of inflammatory processes but are not unusual in neoplasms of long duration. In retrospect, the fistulae were the only firm clue to the diagnosis of neoplasm.

*Case 10.*—C. H., a woman, aged sixty-two, had soreness, itching, and irritation at the anal outlet. Close questioning brought out the fact that she had experienced cramping abdominal pain after meals. Since she was an habitual user of cathartics and mineral oil, this was not given proper value in the symptom complex. There was no weight loss. Proctoscopy and biopsy revealed an early adenocarcinoma, grade II, high in the rectum.

Fluoroscopy demonstrated a concave filling defect of the medial wall of the cecum, indicating a neoplastic mass. This was also revealed by films (Fig. 13). Air injection provided a means of confirming its presence (Fig. 14), and the entire examination was repeated a few days later to further rule out any possibility of artifact produced by fecal material. This repetition of the x-ray examination must sometimes be done to rule out an artifact produced by feces, especially in cases of suspected polypi or cecal neoplasm.

It is worthy of note that, even though the radiologist knew in advance that a rectal neoplasm was present, and even though he made special spot films of the rectum during fluoroscopy, he did not demonstrate the rectal neoplasm. This case illustrates well the necessity of using all three methods of examination: digital, sigmoidoscopic and x-ray.

Operation consisted of right colectomy and iliotransverse colostomy and a one-stage combined procedure for extirpation of the rectum with single-barreled sigmoidostomy at one sitting.

The surgical specimens included a 30 cm. length of ascending colon to which the appendix and a portion

of terminal ileum were still attached; also a portion of terminal colon which included the anal sphincter. Just proximal to the latter, the rectal wall showed a localized mucosal thickening, 2 cm. in diameter, which, on cross section, was confined to the inner muscle coat and the mucous membrane; no satellite adenopathy could be demonstrated. The cecal lesion was a papillary cauliflower-like tumor, 3 cm. in diameter. Cross section through its base showed apparent invasion of the gut wall into the mesocolon, and a few tiny lymph nodes were found in the adjacent mesentery.

Microscopic examination revealed both tumors to be well-differentiated adenocarcinomas, the one in the rectum being somewhat less invasive but definitely malignant. While the two lesions were sufficiently alike in their morphology to suggest the possibility that one is metastatic, their widely separated locations, with absence of demonstrable tumor elsewhere in the abdomen, is strongly in favor of two separate primaries.

The lesson is obvious. Two primaries were demonstrated, but only by using two different methods of examination.

*Case 11.*—P. B., a man, aged forty-seven, presented himself for examination, complaining of perineal discharge and failure of the pelvic cavity to heal following colostomy and posterior resection for carcinoma of the rectum done elsewhere eighteen months previously. Curetings from the posterior sinus tract showed active tumor growth to be present in the mucous fistula extending from the distal sigmoidal stoma to the perineum.

Barium was injected through the distal colostomy opening (Fig. 15). There was a 12 cm. segment of remaining sigmoid colon. From the distal end of this loop, barium followed a sinus tract through the pelvis to an opening in the perineum. Films revealed irregular rounded filling defects at the end of the terminal segment. These suggested recurrence of neoplasm.

The patient was reoperated upon, the conventional Miles one-stage procedure inclusive of the pelvic fistulous tract being used. Examination of the gross specimen showed the neoplasm was still growing in the distal segment of





Fig. 15. Case 11. Barium filling through distal colostomy opening.



Fig. 16. Case 12. Antero-posterior and lateral films after injection of a small amount of barium per rectum.

sigmoid planted in the pelvic floor. The wound healed without incident.

The surgical specimen was a portion of colon, to one end of which a sinus tract was attached by dense adhesions; this tract was almost as long as the colonic segment, and the two formed a continuous cavity, the junction of which was recognized by a polypoid overgrowth of mucosa, distal to which the sinus had a ragged nondescript lining and a thick fibrous wall. A tag of skin attached to the distal end of the tract indicated a cutaneous fistula. Microscopic examination revealed a well-differentiated adenocarcinoma arising from colonic mucosa at the junction of the gut and sinus tract; the proximal sinus wall contained numerous nests of tumor cells.

The first surgical attack had been inadequate. There is no evidence of any further recurrence one year after the second operation.

**Case 12.**—D. K., a boy, aged thirteen, complained chiefly of frequent leakage and soilage at the anal orifice, necessitating the wearing of a diaper. The abdomen was greatly distended and very hard. Ano-rectal examination showed a small opening about the diameter of a lead pencil immediately anterior to the anal sphincter dimple. This consisted of a fibrous tube 1.5 cm. long. A quarter-inch proctoscope encountered hard stool. The diagnosis of congenital anal atresia was made. He had submitted to a corrective operation two days after birth, again at one year and again at age six. The parents felt that nothing further could be done.

Only a tiny catheter could be passed through the anal canal, and barium was injected through this catheter (Fig. 16). It was impossible and inadvisable to fill the entire colon with barium. The colon was so distended with fecal material and air as to completely fill the pelvis and nearly fill the entire abdomen. The diameter of the rectum was 21 cm. (8½ inches). It was evident that all of the obstruction was in the anal canal.

A long and arduous decompressive program was instituted, after which the fibrous tube was dissected upward and transplanted into the sphincter ring. An ex-

cellent result was obtained, and the boy now leads a normal existence without a diaper. Proctoscopic follow-up shows that there has been a very marked decrease in the distention of the rectum.

## YOU ARE THE GOVERNMENT

Says Fort Wayne Chamber of Commerce and presents the government picture on a personal basis:

Your 1948 income was \$4,600. (Government income \$46 billion).

Your present current debt totals \$27,600. (Government debt is \$276 billion).

Your anticipated 1949 income \$4,000. (Government estimated income \$40 billion).

Would you plan in 1949 to spend \$4,200? (Government budget \$42 billion).

*In addition*—Would you, by any stretch of the imagination, decide that *over and above these commitments*, you would have the right to embark on long term spending programs to cover—

A new house (when the old one isn't paid for)?—(Public Housing).

More education for your children?—(Federal Aid to Education).

More health and accident insurance?—(Socialized Medicine).

*Or would you face the facts?* Would you call your family together and tell them that your current bills were so great that everything you had would be wiped out unless substantial payments could be made? Would you say that much as you would like to improve the house, send your oldest boy to college, and increase the amounts of your insurance coverage, that you could not possibly afford to do these things, because you just didn't have the money? Would you insist that you were broke and that everyone in your family would have to go to work to help pay the bills, if they wanted to avoid bankruptcy? *This is NOT a fantastic fairy tale.* It is the plain, unvarnished truth about the financial condition of this country of ours. The only fantastic thing about it is that many of the politicians and do-gooders in Washington seem blind to the stark reality of dollars and cents. *The downfall of every great country since the beginning of time has been caused by the financial unsoundness of government.* The same economic principles which apply to the conduct of individual lives and business also apply to our government. We must stop kidding ourselves if we hope to survive as the No. 1 nation in the world.—*Michigan Realtor.*

# Feeding Problems in Infancy

## Including Demand Feeding

By Ernest H. Watson, M.D.

Ann Arbor, Michigan

A GREAT MANY feeding problems arise because too few women breast-feed their babies. I see very few feeding problems in babies breast-fed for the first three or four months, especially if they are on the so-called "demand feeding schedule." Women do not breast-feed their babies these days because of the mistaken idea, often promoted by physicians, I fear, that it really makes no difference whether they breast-feed or not. It has been repeatedly demonstrated that eight or nine out of every ten women can breast-feed their infants with undoubted profit to mother and child. This is much more likely to occur when the physician is himself convinced of the great value of breast feeding, and is able to convince the mother, too. A knowledge of the psycho-physiologic factors controlling secretion of breast milk must be understood by the physician, so he will be able to advise the mother correctly when certain problems or apparent problems connected with breast feeding make their appearance.

### Problems Connected With Breast Feeding

Breast milk does not "come in" until the fourth to sixth day after the baby is delivered. Any conclusion that lactation has failed before the sixth or seventh day is not properly founded. Feeding of water, glucose and water, or formula before the milk comes in is customary. Formula should be stopped completely with the advent of breast milk flow. The common experience is that breast milk is abundant while the mother remains in the hospital, but that it practically ceases soon after she gets home. This is not a true failure of lactation, but breast feeding may be lost if the physician does not know that this is the common sequence of events and cannot give the explanation for it. The mother, on returning to her home and responsibilities, may have a temporary let-up in milk flow. This causes the infant to cry from hunger—the mother is worried—worry and lactation cannot co-exist in the same woman. A little reassurance or, better still, a forewarning of the

probable event before it occurs is usually all that is needed, plus, of course, the usual advice about fluid and food intake and rest.

The adequately breast-fed infant is never constipated. He may have a bowel evacuation only once a week or even less frequently and still not be constipated. For the physician to advise or countenance laxatives, suppositories or enemas in such cases is not necessary.

If the fact that the mother is rather closely confined to home, or at least to her infant, by breast feeding is regarded as a problem, it can be partially solved by free use of the relief or liberty bottle, a single bottle feeding which I find is greatly appreciated by mothers. It serves as a relief for the mother and as a training experience for the baby, who should, in my opinion, be weaned to total bottle feeding at about the fourth month. A single bottle of one part evaporated milk, one and one-half parts boiled water, and a teaspoonful of Karo syrup or sugar makes a satisfactory "relief bottle."

### Problems Connected With Artificial Feeding

There is not, I believe, any problem of prescribing a formula for a well infant. Nearly all formulas agree with the well infant, and conversely, the sick infant may seem to tolerate none. Evaporated milk in an amount of 1 ounce per pound per day, plus enough water to make the total formula up to  $2\frac{1}{2}$  ounces per pound of body weight per day, is, when strengthened by an ounce of Karo syrup, an adequate formula for nearly all babies. Most of the powdered or liquid proprietary formulas are satisfactory but are expensive. Some are low in protein. Premature babies, small infants and a few others with an apparent low tolerance for fat do better on a half skimmed-milk formula such as Dryco or Alacta.

### Colic

Most infants give evidence of discomfort at times during the first few weeks of life. This is not astonishing. Crying from any cause brings about air swallowing and is the commonest cause of colic. Hunger, therefore, is a cause of colic indirectly, and the two together cause most of the crying of very young infants. Crying is a real problem and may drive the family to distraction. Often the physician erroneously concludes the feeding is not agreeing with the infant and starts by the trial-and-error method to select from

Read at the third annual Postgraduate Clinical Institute of the Michigan State Medical Society, Detroit, March 23, 1949.



among the scores of possible formulas the exact one which will fit this particular infant. This is nearly always a fruitless search. He would do better in nearly every instance to stick by the first formula—assuming it is a good one—and examine the technique, timing and other details of feeding. This is a good place to bring up the subject of demand feeding, which, to hear some of its loudest exponents, is something novel and a recent discovery. Demand feeding, meaning a schedule of feeding dependent entirely on the infant's demands for foods, is quite obviously the very oldest method of feeding for the very young infant and applies equally well to breast or bottle feeding. There are really two considerations in the demand feeding schedule: time and amount. The infant is to be fed not only when he wants to be fed but also as much as he wants. This may seem heretical to the regimentarian school of feeding, but the demand schedule works out better. The very young infant may want and need to eat not six times a day, but seven or even eight, nine or ten times, and remain comfortable and tranquil only when permitted to do so. Does this increase the mother's work? Very little, because all mothers say it is easier and far more satisfactory to feed an infant than to hear him cry or to walk the floor with him.

### Vomiting

Infants may spit up frequently and vomit easily. Parenteral infections notoriously are a cause of vomiting in children. In most instances the regular feeding should be omitted or greatly reduced in volume. Small frequent feedings may be tolerated when regular ones are not. For the infant, one may use clear water, skimmed milk or diluted formula in small frequent feedings. In the pre-school child, water, ginger ale, clear soup or diluted fruit juice, in amounts of 1 to 3 ounces every hour or two, is usually kept down. Prompt chemotherapy or antibiotic therapy of the causative infection is, of course, indicated.

### Diarrhea

Simple diarrhea caused by parenteral infection, by an unusually hot spell of weather, or by a change in water, usually calls for a drastic but very temporary cut in food intake, with substitution of water, tea or S.O.G.\* for the usual food intake.

\*S.O.G. is a solution of essentially normal saline (S), orange juice (O), and glucose (G). It is made by taking the juice of two oranges, two teaspoonfuls of salt and two tablespoonfuls of sugar, and adding water to one quart. More sugar may be used if desired.

Treatment to remove the causative factors is, of course, implied. Severe diarrhea in young infants usually requires hospitalization for parenteral fluid administration. Discussion of the management of such cases does not properly come under the subject of "feeding problems."

### Anorexia

A discussion of feeding problems in infants and young children cannot ignore the complaint of the mother who says her normal-appearing child won't eat. This problem, if it is a real one, usually arises when the mother has tried too hard to get the child to eat. Coaxing, threatening, bribing, or entertaining have no place in getting a child to eat. All that is needed in most cases is reasonable care in selecting and presenting food to children, and a calm matter-of-fact attitude on part of parents, indicating that mealtime is for eating and nothing else. Mealtime should be pleasant but not a three-ring circus. Nor should it be the battle ground where family problems of all kinds are threshed out. Except in unusual cases, children do not need to be fed more than three meals per day. A glass of milk and a cookie may be given in mid-afternoon if the family dinner does not come before 6:00 p.m. Irregular eating between meals is harmful to good eating habits.

### POSTGRADUATE COURSE IN URINARY TRACT DISORDERS

*(Continued from Page 1210)*

Leiter of New York, who will speak on "Uremia" Saturday morning, November 19, and will take part in the panel discussion closing the course.

Inquiries regarding the complete program and registration should be addressed to the Director of Education, Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

### UROLOGY AWARD

The American Urological Association offers an annual award of \$1,000 (first prize of \$500, second prize \$300, and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Statler, Washington, D. C., May 20-June 1, 1950.

For full particulars, write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, N. J. Essays must be in his hands before February 20, 1950.

# How Do You Know Your Patient Is Food Sensitive?

By Theron G. Randolph, M.D.

Chicago, Illinois

**E**VEN though the allergic etiology of certain chronic symptoms may be recognized, too frequently a physician's ability to help his patient ceases at this point except insofar as the degree of relief which may be afforded by the use of various symptomatic and nonspecific therapeutic measures. Although at times very helpful, drugs based upon their sedative, sympathomimetic and antihistaminic properties neither afford a satisfactory long-term therapeutic program nor serve as a substitute for specific allergic diagnosis.

Physicians are generally aware that particular foods may be the cause of acute intermittent allergic symptoms, based on the fact that they and their patients are usually able to detect the causal relationship of foods eaten infrequently because of the presence of immediate symptoms following their ingestion. In accordance with the concept of food allergy developed by Rinkel,<sup>20</sup> physicians are not as aware that food sensitivity is commonly the cause of chronic symptomatology, due to the fact symptoms are not ordinarily accentuated noticeably immediately after the ingestion of foods eaten frequently. Thus allergic reactions to the common articles of the diet are not only the most difficult to detect but actually are the most common in occurrence.

Food allergy exists when a specific and constant cause-and-effect relationship may be demonstrated between the ingestion of a food and the production or accentuation of allergic symptoms. The patient's suspicion of sensitivity or the presence of positive skin tests with food extracts are not relied upon. Although diagnostic skin tests with foods are still performed by many allergists, in our experience they have been more misleading than helpful and for the past five years have been discarded. This deduction should not lead one to disparage the relatively high degree of accuracy of skin test techniques employing extracts of inhalant

TABLE I. THE ORDER OF INCIDENCE OF FOODS CAUSING ALLERGIC SYMPTOMS

Zeller <sup>36</sup> 1934	Rinkel <sup>18</sup> 1936	Rinkel <sup>19</sup> 1940	Randolph and Yeager <sup>14</sup> 1946	Randolph 1948
Wheat	Wheat	Wheat	Corn	Corn
Beans	Egg	Corn	Wheat	Wheat
Chocolate	Milk	Egg	Milk	Milk
Orange	Corn	Milk	Egg	Egg
Potato		String bean	Potato	Potato
Tomato		Potato	Orange	Orange
Egg		Tomato	Beans	Lettuce
Banana		Lettuce	Beef	Tomato
Pork		Coffee	Tomato	Beans
Rye		Apple	Coffee	Beef
Milk		Peach	Lettuce	Coffee
Fish		Pineapple	Pork	Pork
Spinach		Beef		
Corn		Pork		

allergens. Such procedures, in addition to a detailed history, are essential parts of every allergic investigation. The specific diagnosis and control of inhalant allergy is attempted in each case prior to starting diagnostic studies for the detection of specific food allergy.

The four most common food allergens as determined in a 1947 survey<sup>14</sup> of 200 consecutive cases diagnosed specifically by means of individual food tests<sup>13,21</sup> were corn, wheat, milk and eggs. It is of interest to note from Table I that the relative incidence of various foods has changed in recent years. Particularly noteworthy is the position of corn—it having been fourteenth in Zeller's series in 1934,<sup>36</sup> fourth and second in Rinkel's tabulations in 1936<sup>18</sup> and 1940,<sup>19</sup> respectively, and now is in first place. Lettuce sensitivity is also being diagnosed with increasing frequency, and in the writer's opinion has moved into seventh place.

The relative importance of allergy to corn is not surprising inasmuch as corn products have become basic food and pharmaceutical ingredients; this was first emphasized by Rinkel.<sup>18,19,23</sup> His observations have been confirmed and extended by the author.<sup>10,12,15</sup> At present corn is ordinarily encountered in every meal containing commercially prepared foods and in the majority of between-meal feedings, either in the form of corn as such, corn starch, corn sugar (dextrose and glucose) or corn oil. Actually, sensitivity to corn and wheat are approximately equal in incidence; corn is emphasized here because in the past and in certain current quarters it is not regarded as a particularly important food from the standpoint of its role in allergy.

The reason a patient is unable to suspect a given food eaten at frequent intervals appears to be the result of a curious phenomenon, not basically understood but; nevertheless, of tremendous im-

Presented at the eighty-third annual session of the Michigan State Medical Society at Detroit, September 24, 1948.

Aided by a grant from Swift and Company for the study of food allergy.

Dr. Randolph is an instructor in medicine, Northwestern University Medical School, Chicago, Ill.



portance in the practice of medicine. This phenomenon, known as the masking of symptoms so frequently occurring with the repeated use of a food allergen, was first clearly described by Rinkel.<sup>20</sup> In the presence of the most typical masking, the individual notices temporary improvement in his chronic allergic symptoms for at least two or three hours after eating a food acting in this manner. With the repeated use of such a food, he experiences his most troublesome symptoms toward the ends of periods of fasting. As a rule and if the food in question is taken several times daily, he may be expected to have a flare of his chronic smoldering symptoms on arising in the morning but before breakfast; he may awaken between 2:00 and 5:00 a.m. either with classical allergic symptoms or simply with insomnia which arouses him with a characteristic timing and from which he has great difficulty in returning to sleep. With higher degrees of sensitivity he may also experience difficulty in getting to sleep or he may have a characteristic accentuation of his chronic symptoms between two and four hours after meals containing his masked food allergens.

Masking of symptoms from the ingestion of major allergenic foods, and the fact that in most cases one is dealing with multiple sensitivities, aids in explaining many of the difficulties encountered in the recognition of the etiologic roles of specific food allergens.

The most accurate means of diagnosing a specific allergic response to a frequently ingested article of the diet is to avoid its ingestion until the patient has recovered from the effects of the last feeding; the shortest interval which most effectively accomplishes this end has been determined by Rinkel<sup>21</sup> as being four days of complete abstinence of the food in question. Then as a diagnostic measure, this food is ingested fasting on the fifth day under observation, as the only article of the diet in an experimental feeding. Both the relative incidence and severity of symptoms are carefully observed by the physician or his trained assistants. In the absence of an immediate or unequivocal symptom response, a second feeding is given an hour later and observations continued for an additional half hour. The present technique of the individual food test was published by Rinkel<sup>21</sup> in 1944 and confirmed in all respects by Dr. Rawling and myself<sup>13</sup> during the war while in the Allergy Clinic at the University of Michigan.

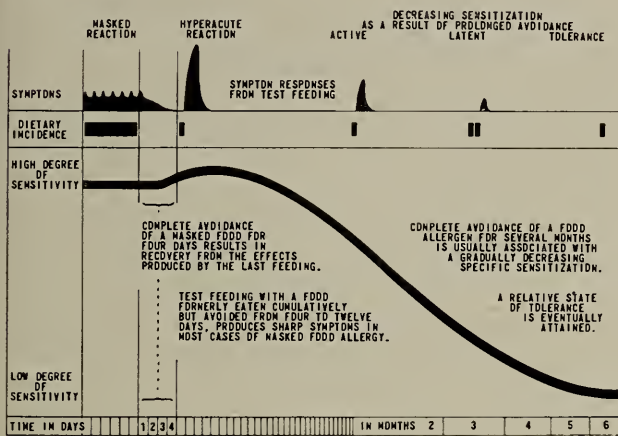
An illustration of the clinical phenomenon of masking and unmasking of symptoms will be cited. This case is exceptional and unusually simple, in that one is dealing only with sensitivity to a single food ingested once daily. A thirty-five-year-old woman bookkeeper had been subject to daily paroxysms of bronchial asthma beginning within an hour of 4:30 p.m. each afternoon for six months, regardless of whether or not she was at work. She slept soundly through the night and had only a moderately troublesome rhinorrhea on awakening in the morning. She also was subject to occasional mild headaches. In view of this history, a common food taken in each noon meal was immediately suspected. Her food history revealed that she was in the habit of eating a large lettuce salad each day for lunch, rarely ever eating lettuce otherwise. Of equal importance was the fact that she was very fond of lettuce and had never suspected it of causing trouble. This food was then completely avoided for four days and taken fasting on the fifth. Her asthma improved on the third day and was absent on the fourth. Ten minutes after the experimental feeding of lettuce she noticed tightness and pulling of the posterior cervical muscles which progressed into a generalized headache. Nausea immediately followed the second feeding, and within ten minutes she noticed rhinorrhea, tightness of her chest and increasing huskiness of her voice. For an hour she continued to have a severe headache, rhinorrhea and troublesome asthma, following which she vomited. She immediately felt improved, and three hours after vomiting ate her usual evening meal. She awakened the following morning with marked stiffness of her neck but otherwise had no troublesome symptoms.

The phenomenon of masking and the hyperacute reaction following test feeding of a previously masked food allergen that had been previously avoided for a few days are the first two stages of cyclic food sensitivity as described by Rinkel<sup>20,21,24</sup> and illustrated diagrammatically in Figures 1 and 2. These charts, modified from his work, illustrate in the upper sections the various changes in the degree of sensitivity associated with the incidence of a specific food in the diet. In a minority of instances, sensitivity is not reduced materially by the avoidance of a food in question over a prolonged period of time. He has referred to this as fixed in contrast to cyclic food allergy. Other points in these charts are self-explanatory.

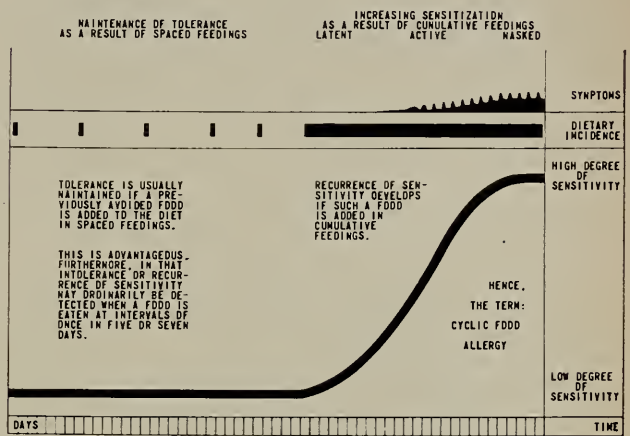
What, then, are the points in this history of a case that should lead one to suspect the existence of food sensitivity? This will be discussed in two parts: first, in respect to the general type and tim-

expressed by Rowe,<sup>28</sup> Rinkel<sup>20</sup> and Meyer.<sup>6</sup> A diagnostic approach for the detection of specific food allergy based on the ability to reproduce symptoms under controlled conditions of testing

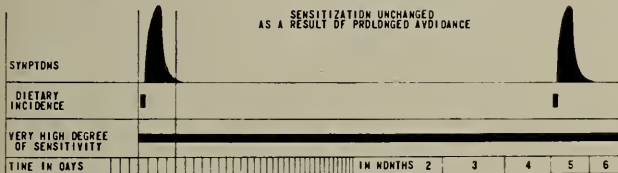
## I. CYCLIC FOOD ALLERGY



## I. CYCLIC FOOD ALLERGY



## II. FIXED FOOD ALLERGY



## II. FIXED FOOD ALLERGY

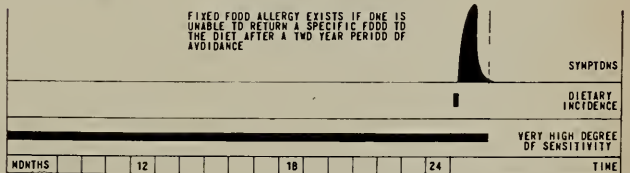


Fig. 1. Types of food allergy based on the response to specific avoidance. Modified after Rinkel, H. J.: Ann. Allergy, 2:115, 1944.

Fig. 2. Types of food allergy based on the response to specific avoidance. Modified after Rinkel, H. J.: Ann. Allergy, 2:115, 1944.

ing of symptoms, and second, in regard to the specific allergic manifestations presented by the patient.

The general type and timing of symptoms suggestive of food allergy as modified from Rinkel's observations<sup>20,21,22,24</sup> are listed in Table II. These, in short, are the points in the history that should cause one to suspect the presence of food sensitivity regardless of the particular manifestations exhibited by the patient.

In addition, many patients with unexplained clinical manifestations, and currently dubbed as neurotics, have been found to have their symptoms on the basis of a chronic food allergy. This statement is not based on any assumption that psychosomatic factors are not of importance in medicine but on the ability to reproduce these symptoms experimentally and repeatedly at will following the deliberate ingestion of individual foods. Neither is this a new point of view, for Shannon<sup>30</sup> as early as 1922 pointed out the numerous clinical similarities between the neuropathic and the exudative diatheses. A similar point of view has been

TABLE II. SYMPTOMS SUGGESTIVE OF FOOD ALLERGY  
Modified from Rinkel, Ann. Allergy, 2:115, 1944

Their General Type		1. Troublesome pruritus, particularly itching of the nose, throat, ears and skin
		2. Profuse mucus secretions
Their Timing	Masked Sensitivity	3. The accentuation of symptoms on arising, on awakening during the night or occurring immediately prior to meals.
	Unmasked Sensitivity	4. The presence of acute allergic episodes, beginning within two hours after a meal and commonly persisting from one to three days.

has been more helpful to patients having symptoms of the types to be described than to resort to the expedient of assuming that such symptoms are on the basis of "nervousness" or emotional factors.

Before listing the syndromes that are most frequently found to be on the basis of chronic food allergy, one should bear in mind that the methods of specific diagnosis are identical regardless of the type or localization of the patient's symptoms.

Gastrointestinal reactions are probably the most common manifestations of food sensitivity. One may have sharply localized responses involving any portion of the alimentary canal, any of the so-called vague gastrointestinal complaints or, at



times, a clinical picture difficult to differentiate from acute intestinal obstruction, appendicitis, peptic ulcer and gall-bladder disease.<sup>17,28,35</sup> In the writer's experience, cases of so-called irritable bowel syndrome or mucus colitis are usually on this etiologic basis, as originally described by Duke<sup>3</sup> and by Vaughan.<sup>32,34</sup> In these cases the factors of specific food sensitivity have been found to be of greater importance than the relative "blandness" or "roughness" of the diet. The writer also agrees with Andresen<sup>2</sup> and Rowe<sup>29</sup> that food allergy is a common causative factor in ulcerative colitis.

Of almost equal importance is the role of food sensitivity in the production of various types of headaches, the early contributions of which were made by Vaughan,<sup>33</sup> Rowe,<sup>26</sup> Eyermann<sup>5</sup> and Rinkel.<sup>16</sup> Actually, any "descriptive type" of headache, irrespective of whether or not it meets the requirements of "migraine," may and most frequently does have a food allergic reaction as to its etiologic mechanism. This includes the so-called "tension headache," characterized by pulling, drawing and tautness of the muscles of the posterior neck. Myalgias in this area have been observed repeatedly in the course of performing individual food tests and commonly represent the initial evidence of a subsequent headache. Symptoms localized to these muscles or other muscle groups may be very mild in nature or exceedingly acute, in certain instances, giving rise to the clinical picture of acute torticollis.<sup>9,11</sup> Similar muscle aches and pains of allergic origin have been described by Rowe<sup>28</sup> and Meyer.<sup>6</sup>

At least equally important clinically is the incidence of chronic nasal allergy. Although most commonly due to coexisting food and inhalant sensitivity, the role of food allergy is usually paramount in the type of case characterized by perennial symptoms. Dust sensitivity is the most important mechanism in instances where chronic rhinitis is limited to the months requiring furnace fires, although food allergy plays a contributing role in many such cases.

Frequently associated with one or more of the above clinical manifestations but sometimes occurring as the only expression of allergy, is the presence of the fatigue syndrome of allergic origin, originally described by Rowe<sup>25,26,27</sup> and recently reviewed by the author.<sup>7,8</sup> Chronic food allergy is believed to be one of the most frequent causes of

the clinical picture of drowsiness, unexplained fatigue, aching, irritability and so-called "nervousness" and "tenseness," characteristically present at all times but usually accentuated on arising in the morning.

Atopic dermatitis is most commonly the result of specific food allergy but is also complicated by inhalant allergy in many cases, the additional incidence of inhalant sensitivity being roughly proportional to the patient's age but rarely the sole etiologic cause of this disturbance.

Chronic bronchial asthma of perennial type with nocturnal exacerbations associated with the production of copious amounts of mucus is almost invariably associated with food sensitivity but is also commonly complicated by additional inhalant sensitivity.

Seasonal hay fever and seasonal bronchial asthma are due primarily to inhalants, but many cases also have a concomitant food allergy which must be diagnosed specifically to afford the maximum degree of relief.

Urticaria may be on the basis of food sensitivity but also results from several other specific allergic and nonspecific causative factors.

In addition, the food sensitization process has been known to cause purpura,<sup>1,31</sup> genito-urinary symptoms,<sup>4</sup> and joint manifestations suggesting arthritis,<sup>37</sup> and various other minor syndromes.

From this brief review it should be apparent that any so-called allergic expression may be on the basis of food sensitivity and that the localized and constitutional manifestations of the food allergy process are considerably more frequent than commonly recognized. It should be apparent to the reader that in speaking of food allergy, we are not discussing a rare process in medicine but are dealing with an etiologic mechanism responsible for symptoms observed every day by physicians actively engaged in medical practice.

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(Continued on Page 1276)

# Diaphragmatic Hernia

By John W. Strayer, M.D.  
Ann Arbor, Michigan

**A**LTHOUGH the diagnosis of diaphragmatic hernia was first made many years ago, it has not been until recently that the frequency of diagnosis has increased. The greater awareness of the clinician that such a situation may exist accounts for this fact. Much has been written in the last ten years to acquaint the physician with diaphragmatic hernia and cause him to realize that it is a relatively common disease.

Harrington reports that at the Mayo Clinic from 1908 to 1926 the diagnosis of this disease was made but thirty times. From 1926 to 1938, 437 cases were uncovered. A similar situation existed at the University Hospital. Prior to 1934 there were thirty cases of herniations of the diaphragm recorded. From 1934 to 1947, 298 cases of all types of diaphragmatic hernia were revealed. One hundred and fifty-eight of these were found in the years 1942-1947, which cases form the subject of this article.

## Classification

Nowhere in the literature does there exist so much confusion as there is in the classification of diaphragmatic hernias. It is difficult to attempt to have classification include everything, such as anatomy, embryology, etiology, type of trauma, presence or absence of a sac, pathology, contents of hernia and others. Under such circumstances, the simplest classification is frequently the most satisfactory. The one presented by Harrington has many desirable attributes:

### 1. *Non-traumatic*

#### a. *Congenital*

- (1) Foramen of Bochdalek
- (2) Dome
- (3) Hiatus-esophageal
- (4) Foramen of Morgagni
- (5) Gap in left diaphragm

#### b. *Acquired*

- (1) Esophageal hiatus
- (2) Congenital sites
- (3) Any developmental fusion site

### 2. *Traumatic*

- a. Indirect injury
- b. Direct injury

*Non-traumatic Hernias.*—The two great types of hernias that occur in this category are the congenital and the acquired. The congenital types appear as a result of maldevelopment of one or more of the structures that contribute to the mature diaphragm. These occur in rather definite sites. The most common site is through the foramen of Bochdalek on the left side. The right side, of course, is protected by the right lobe of

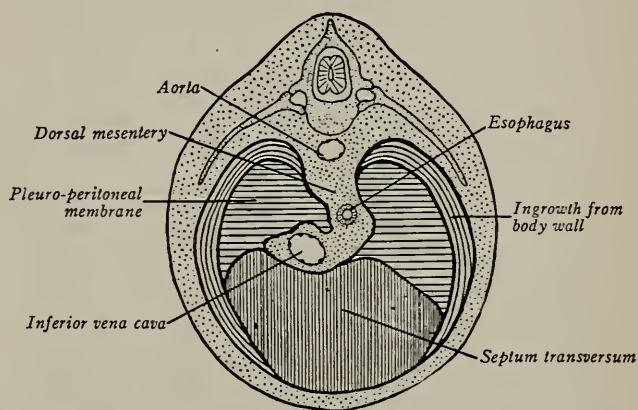


Fig. 1. Diagram identifying the several contributions to the definitive diaphragm (after Broman).

the liver, hence rarely if ever is this hernia found on that side. This is a posterolateral defect, usually very large, containing any of the abdominal viscera, and as a rule does not have a sac. Because of its size and contents, it can produce either abdominal or thoracic complaints. The chest symptoms are a result of compression of the lung and heart and are usually seen shortly after birth. Abdominal symptoms are caused by incarceration of a viscus with obstruction, strangulation or even perforation. It should be noted, however, that it is not at all uncommon for an individual to go through life with a congenital defect and have no symptoms whatsoever. Asymptomatic congenital hernias are not uncommonly first seen on routine chest x-rays.

The second most frequent congenital defect is through the dome of the diaphragm. This type can vary in extent from a small localized defect to one involving complete absence of the left diaphragm. Eventration of the diaphragm is a similar condition but there is no defect in the continuity of the dome. In eventration there is a failure in development of muscles of the organ, and although there is an intact fibrous membrane present between the thorax and abdomen, it is considerably thinned, permitting abdominal or-



gans to project high up into the chest. There is no true hernia with a sac or neck present but the disproportion that is present may lead to angulation of abdominal organs and thereby produce symptoms. The majority of these cases are asymptomatic.

Congenital hernias through the esophageal hiatus are not uncommon. They can present themselves as a simple pulsion type or the large, more popularly known "upside down stomach." The congenitally short esophagus or thoracic stomach is not a hernia. It has its origin in fetal life but usually does not manifest itself until late in life. It is due to a failure of the descent of the esophagus and stomach in keeping up with the caudad migration of the diaphragm. This results in a portion of the stomach persisting above the diaphragm and the lower esophagus is placed under tension.

The foramen of Morgagni, or Larrey's space, is the only anterior site of congenital hernia. This is found subcostosternally and is wider laterally than it is in its anteroposterior diameter. It usually contains only the colon and omentum. These also are relatively asymptomatic and may be found incidentally on routine chest x-rays. They are oftentimes mistaken for intrathoracic tumors.

The last type of congenital hernia, one that is also least common, is that which results in absence or partial absence of the left diaphragm. This presents a bizarre picture with almost any of the abdominal organs contained within the defect. A sac is usually absent here also. Such organs as the appendix and left kidney have been found in these hernias.

There is no doubt that many of these hernias should be called "congenital-acquired," and just where the differentiation should be made is purely an academic point. Esophageal hiatus hernias are the most frequently seen acquired hernias. Just how many occur through a congenitally weak hiatus is difficult to ascertain. Other acquired hernias can occur through any of the congenital weaknesses mentioned in the preceding paragraphs or through any of the fusion areas enumerated in the embryological development of the diaphragm.

*Traumatic Hernias.*—Those due to indirect injury are most frequently through the left side. The central tendon is the weakest area and is torn to produce the defect. Direct injury is that in which there is intimate trauma to the organ by some object penetrating the body and piercing

TABLE I

Type	Male No. %		Female No. %		Total No. %	
1. Esophageal hiatus	51	32	80	50	131	82
(a) Cong. short esophagus	8	5	11	7	19	12
(b) Small hiatus hernia	26	16	33	21	59	37
(c) Med. hiatus hernia	11	7	26	16	37	23
(d) Large hiatus hernia	6	4	10	60	18	10
2. Foramen of Bochdalek	6	4	1	.6	7	4.6
3. Eventration	4	2.5	2	1.2	6	3.7
4. Central tendon defect	4	2.5	—	—	4	2.5
5. Foramen of Morgagni	1	.6	2	1.2	3	1.8
6. Other	—	—	7	4.4	7	4.4
7. Phrenic ampulla	2	1.6	2	1.5	4	3

the diaphragm sufficiently to produce a gap in its substance. This sort of injury, of course, can cause a defect anywhere in the diaphragm. Direct injury can also be due to subdiaphragmatic accumulations of inflammatory tissue which may erode through the leaf of the diaphragm, leaving a potentially weak area through which abdominal viscera may herniate.

Of the 158 cases at the University Hospital between the years 1942-1947 the types of hernias were as shown in Table I.

Phrenic ampulla is mentioned in Table I. This is not a hernia and it will be discussed later. However, its differentiation from a true hernia is important, hence its inclusion in the group. All of the above types were determined by autopsy, x-ray, operation or a combination of these.

TABLE II

Sex	No.	%
Male	66	43
Female	90	57
Age	No.	%
Under 6 months	5	3
6 months-9 years	2	1.2
10 years-19 years	3	1.7
20 years-29 years	6	3.8
30 years-39 years	6	3.8
40 years-49 years	22	14
50 years-59 years	48	30
60 years-69 years	46	29
70 years-79 years	18	11
80 years or more	2	1.2

Table II is included to indicate the sex and age incidence of the individuals included in this review. Much emphasis has been placed by some authors upon these factors as predisposing influence in the production of diaphragmatic hernias.

It can be seen from this table that 85 per cent of all diaphragmatic hernias are found in patients over forty years of age; 88 per cent of these are esophageal hiatus hernias.

### Symptomatology

The symptoms produced by diaphragmatic hernias depend a great deal upon the organ or organs included in the hernia. Because of the wide

TABLE III

Symptom	No. of Patients	%
1. Epigastric pain or discomfort	40	25
2. Epigastric pain postprandial	33	21
3. Gaseous distention	31	19
4. Loss of weight	33	21
5. Gain of weight	2	1.2
6. No change in weight	123	77.8
7. Pain left side or back	28	18
8. Postprandial vomiting	21	13
9. Nausea and vomiting	14	9
10. Nausea only	8	5
11. Vomiting only	16	10
12. Pyrosis	22	13
13. Dysphagia	18	11
14. Hematemesis	14	9
15. Pain with change of posture	17	11
16. Night pain—epigastric	10	6.3
17. Pain in right chest	9	5.6
18. Substernal pain without radiation	17	11
19. Substernal pain with radiation	9	5.6
20. Substernal pain with exertion	4	2.5
21. Shortness of breath	14	10
22. Cyanosis	4	2.5
23. Palpitation	6	3.8
24. Melena	7	4.4
25. Loss of appetite	2	1.2

TABLE IV. DURATION OF SYMPTOMS

	No.	%
1. No relevant symptoms	31	19
2. Less than 24 hours	5	3
3. 1 day to 1 week	1	0.6
4. 2 weeks to 6 months	27	17
5. 7 months to 1 year	17	10.7
6. 1 year to 5 years	35	22
7. 6 years to 10 years	18	11
8. Over 10 years	26	16.7

variety of these the name of "masquerader of the abdomen" has been given to it. Table III is a list of various symptoms found in our cases.

It is obvious that there is no symptom complex that is very constant in this disease. Indeed, it is of interest that 19 per cent of these patients had no gastrointestinal complaints at all. Forty-six per cent, or almost half of the group, had epigastric pain either constantly or after eating. Most of the patients were able to eat well despite their complaints. Only two complained of a loss of appetite.

Diaphragmatic hernia, especially the hiatus type, is not usually considered in the differential diagnosis of dysphagia, although 11 per cent of these patients complained of this symptom. Nor is it often considered when the etiology of hematemesis is under question; yet 10 per cent of these exhibited this in their symptom complex. In several, hematemesis was the chief and sole complaint. Pain along the left costal margin or back is described as being a common pathognomonic symptom of diaphragmatic hernia, but it was seen in but 18 per cent.

Chest complaints were less common but still occurred in such a manner that they mimicked other symptom complexes. For example, sub-

sternal pain with radiation to the arms or shoulders was present in 5.6 per cent of all cases. Four patients had substernal pain with exertion. Shortness of breath and cyanosis occurred less frequently.

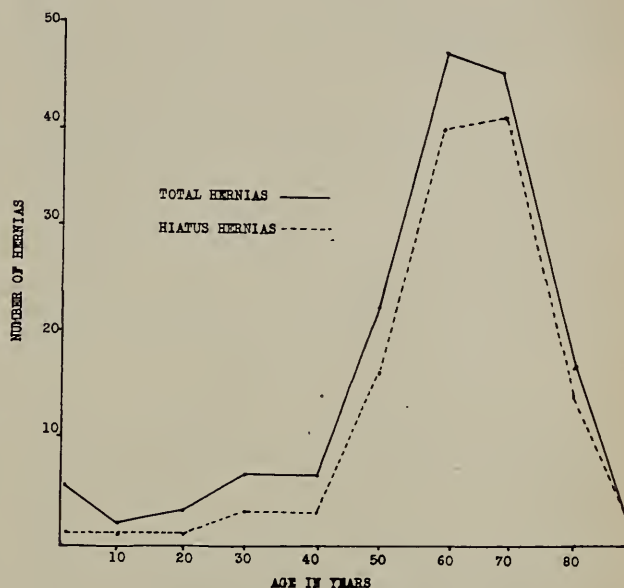


Fig. 2. Distribution of all hernias and hiatus hernias according to age of patients.

The severity of symptoms among this group varies markedly. As we mentioned above, thirty-one (19 per cent) had no symptoms, and thirty-three (twenty-one per cent) had mild complaints. Sixty (thirty-eight per cent) had what should be considered as severe symptoms.

About 50 per cent of the patients had their symptoms for one year or longer. It was only the traumatic or large congenital hernias that manifested themselves earlier than this. Twenty-three (14.2 per cent) had had a previous operation on the gastrointestinal tract; ten of these had been gall bladder removals. There was a history of associated trauma in only ten (6.3 per cent), so trauma as a contributory factor was not too important, at least in this particular series.

Almost half (48 per cent) of these patients were moderately or markedly overweight, which is the one rather constant finding in physical examination. This is a most characteristic feature of this disease and usually impresses the examiner as a paradox as far as the patient's gastrointestinal symptoms are concerned. The only other finding of any frequency was tenderness in the epigastrium (17 per cent). Eleven and two-tenths per cent



TABLE V. PHYSICAL FINDINGS

	No.	%
1. Overweight—obese	58	37
2. Overweight—mild	17	11
3. Underweight	6	3.8
4. Tender in epigastrium	27	17
5. Presence of other hernias	18	11.2
6. Anxiety state	14	8.8
7. Pallor	4	2.5
8. Signs of bowel in the chest	5	3.1
9. Signs of intestinal obstruction	3	1.9
10. Findings not associated with hernia	15	9.4
11. Positive chest findings	9	5.7
12. Negative examination	23	14

had hernias in other parts of the body, suggesting perhaps an inherent muscular weakness of the entire body or a general increase in intra-abdominal pressure. Some sort of anxiety state was not uncommonly present (8.8 per cent), which no doubt caused a magnification of symptoms, making severe symptoms out of relatively benign ones.

### Laboratory Findings

Shafar notes that anemia in hiatus hernia is very common, and he quotes Murphy and Hay as finding it present in 66 per cent of their cases. This figure is considerably higher than was found at this hospital. The anemia that was present was of a hypochromic microcytic type.

TABLE VI

Hemoglobin above 80%	103	65%
Hemoglobin 70-80%	15	9%
Hemoglobin below 70%	19	12%
No hemoglobin examination reported	21	14%

### Diagnosis

It is popularly believed that the diagnosis depends solely on the x-ray. This is true to a great extent, but of equal importance is the suspicion that the disease exists, so that one may consider the diagnosis clinically. This certainly is not too difficult despite the multiplicity of symptoms provoked and the few physical signs present. The diagnosis should be suspected when a middle-aged obese female patient is found complaining of epigastric pain or pain along her left costal margin. She may also have a history of vomiting following her meals and epigastric discomfort after eating. X-rays, however, should be requested specifying the importance of examining the patients in the horizontal position and instructing them to strain with the ingestion of barium. Many hernias of the hiatus type can be overlooked if this is not done because of the sliding character of many of them.

The types of hernias found have been listed in Table I. Probably the most interesting and most

common group is the esophageal hiatus type. Not to be confused with this is the phrenic ampulla. This is not a true hiatus hernia and can easily be confusing. It is a dilatation of the distal portion of the esophagus due to a temporary cardio-spasm. It can be differentiated from a true hernia by its constriction at the hiatal opening and also by the absence of rugal pattern extending from the stomach up through the diaphragm. The differentiation of this condition from a hernia is important because surgical attack on an ampulla is worthless whereas it is of untold value in a true hernia.

Hiatus hernias can be of several different types. The congenitally short esophagus or partial thoracic stomach is a most interesting situation and can be a difficult diagnostic problem. Nine of the nineteen patients with this deformity had dysphagia as a presenting complaint. These symptoms are due to actual obstruction. The probable cause of this is a reflux of acid gastric contents into the lower esophagus, causing ulceration and scarring. The ulceration is a source of bleeding, as it was in five of our nineteen cases. The healing of the ulcerations, with subsequent scar formation, contracts the lumen, causing obstruction at the cardia. On many occasions the x-ray picture may resemble that of a neoplasm, and the diagnosis made as such because of the marked irregularity in the lower esophagus. Three cases of congenitally short esophagus were considered as neoplastic by x-ray, but esophagoscopy on each resulted in biopsy specimens showing only inflammatory tissue. Although extremely unusual, a neoplasm can occur in these hernias and did in one of our cases. This was a gastric carcinoma that developed in the herniated portion of the stomach. This is a rare occasion, according to most writers.

Other types of hiatus hernia are those in which the esophagus is long enough to reach the diaphragm but is displaced by the hernia to enter the herniated stomach any place on the superior or posterior portion. These are the so-called pulsion types of hernia. The rugae of the stomach can be followed under the fluoroscopic screen up into the hernia.

Eventration is most frequently encountered as an incidental finding because the majority of patients with this defect have few or no symptoms. This type of hernia is usually described as an elevation of the left half of the diaphragm and is characterized by a paradoxical motion of the left

diaphragm on sniffing. Any of the upper abdominal organs can be seen in the eventration. Six patients had eventrations in our series. Two of these had no complaints, two had mild symptoms and two had moderate symptoms.

Defects through the foramen of Morgagni are relatively uncommon. Only three of 158 patients had hernias of this type. This hernia is frequently mistaken for an intrathoracic tumor, and the patient may come to the surgeon with this diagnosis. It is unusual for this type of hernia to produce symptoms. The colon and omentum are the usual inhabitants of this defect, but the stomach and left lobe of the liver have been found there.

The foramen of Bochdalek is posterior and in it may be found any of the abdominal organs, including kidney and spleen. These hernias are, as a rule, large and may cause intestinal obstruction or, because of their size, produce pulmonary complaints by compressing the thoracic viscera. They always present a very bizarre x-ray picture.

Other less common congenital hernias and traumatic hernias can produce similar bizarre pictures. Any or all of the abdominal contents can migrate through these defects into the chest cavity. Both an upper gastrointestinal study and a barium enema should be performed in an attempt to identify the contents of these hernias.

TABLE VII. SIDE OF DEFECT

	No.	%
1. Left side	145	92
2. Right side	6	3.7
3. Both sides	7	4.3

The left side of the diaphragm was the side of herniation in 92 per cent of our cases. The right side was relatively uncommon. This is explainable, in part, because of the presence of the liver to protect this side from trauma. This organ acts as a cushion to absorb any blow or as a cork to plug up any defect that may be present at birth. The hernia was considered extending into both sides of the thorax in 4.3 per cent. Most of these were large hiatus hernias which had dissected laterally to both sides. Actually the defect in these cases started in the left diaphragm but in the course of its development enlarged to both sides.

### Treatment

Associated x-ray findings often make it difficult to determine whether the patient's presenting symptoms were due to the presence of a hernia

or to associated lesions. Nineteen per cent of our cases had no symptoms at all, so no treatment was advised. Twenty-one per cent were considered to have mild complaints, and 36 per cent, moderate. All of this group were given a trial on medical therapy. Twenty-two per cent had symptoms which were judged severe. Most of these were advised to have an operation, but only half of these submitted to it.

In all hiatus hernias, regardless of severity of complaints, it is well worth while to consider a trial on a nonsurgical regime. In large congenital and traumatic hernias, an operation is more or less essential and should be performed early, especially if there are pulmonary complaints or intestinal obstruction. The medical treatment consists of a reduction diet for those who are overweight. This alone may produce complete cessation of symptoms. A low residue diet with small frequent feedings should be advocated. The Meulengracht diet has been found to be excellent in this behalf.

Antispasmodics, such as belladonna, or belladonna and phenobarbital compounds in the more anxious, may prove of value. These patients should be instructed to eat slowly and masticate thoroughly. Fluids should be taken in abundance between meals. Lying in a reclining position after meals should be discouraged. Sleeping at any time should be in a semi-sitting position to discourage herniation through the defect. Many authors advocate the use of olive oil with each meal. A very important admonition to make to the patient is the necessity of eliminating causes of straining such as constipation, chronic cough, prostatism, or heavy lifting. Varying degrees of improvement can frequently be obtained on this regime.

Should this management fail and symptoms progress, an operation should be advised. The patients with a congenitally short esophagus with dysphagia will derive tremendous relief from esophagoscopy and weekly dilatations. A phrenic paralysis may aid occasionally in relieving symptoms in a small hiatus hernia, but as a rule this treatment is not effective. It can be used on the poor risk patients who could not withstand a more major procedure. In our series three patients had a temporary paralysis of their phrenic nerves as the only surgical treatment, and only one noted any improvement. Six others had a phrenic crush performed before or during a major surgical repair of the left diaphragm. This was done to



facilitate the surgical procedure and to keep the diaphragm at rest during convalescence.

Of the 158 cases in the past five years, eight patients had a repair of their diaphragmatic defect through the thorax and eight via an abdominal approach. One patient underwent operation by both approaches on the same admission. Following the abdominal repair there was a recurrence which was satisfactorily repaired at a later trans-thoracic operation. The question always arises as to which approach is more desirable for any particular hernia. Harrington advocated doing all left-sided hernias through the abdomen and all right-sided ones through the thorax. He feels that for left-sided hernias the abdominal approach lends itself to less risk of thoracic complications. It is especially good in the esophageal types of hernia because the sac is always in the posterior mediastinum and not in the thorax.

Hedblom, on the other hand, used slightly different criteria for approaches to the diaphragm. His indications for the abdominal approach are intestinal obstruction, hernias through the foramen of Morgagni, and hiatus hernias, especially if the diagnosis is not clear cut. This is, in cases where one is not sure that the patient's symptoms are due solely to the hernia, an abdominal exploration may be carried out to seek out other pathologic conditions. The reason for this approach in intestinal obstruction is obvious, because certainly if strangulation is present, resection can be done through the abdomen. The anterior position of subcostosternal hernias makes the abdominal approach ideal for repair of this defect. He advises thoracotomy in all freshly penetrating wounds of the diaphragm, in old large chronic traumatic hernias where there may be adhesions with partial obstruction, and in all individuals who have a long narrow chest with an acute costal angle. The real issue, then, is whether the hernia is "stuck" enough in the thorax by old adhesions versus difficulty in reduction via thoracotomy. The actual repair of the defect can be done much easier from above.

In the newborn, large hernias containing most of the abdominal viscera are best attacked through the abdomen. There are very few, if any, adhesions in this group and the herniated organs can be delivered out of the chest easily. Often, after closure of the diaphragmatic defect, the peritoneum and fascia of the abdominal wall cannot be

TABLE VIII

Organs	No.	%
1. Stomach	132	83
2. Stomach and colon	5	3.1
3. Stomach and omentum	3	1.9
4. Stomach and omentum and colon	9	5.7
5. Colon alone	3	1.9
6. Omentum only	1	.63
7. Spleen with other organs	2	1.2
8. Small bowel with other organs	3	1.9
9. Appendix with other organs	2	1.2
Results of Treatment	No.	%
1. Improvement with medical treatment alone	27	17
2. No improvement with medical treatment alone	7	4.4
3. Improvement with surgery	15	9.5
4. No improvement with surgery	2	1.2
5. Recurrence of hernia	5	3.1
6. Postoperative death	1	5.5 (total of 18 ops.)
7. Death due to unrelated causes	9	5.6
8. No recorded follow-up	96	60

brought together in these infants. The method advocated by Ladd and Gross of closure of the abdominal wound in two stages will solve this very real difficulty. In the first stage recommended by these authors the subcutaneous tissue and skin of the abdominal wall are the only tissues approximated. These tissues have a great deal of elasticity and can be stretched considerably, whereas fascia and muscle do not lend themselves readily to this. In several days the wound is reopened and a layer closure done.

These patients, with the exception of the newborn with a massive hernia, are usually in good condition and require a minimum of preoperative care. Harrington advises a preoperative esophagoscopy on all patients with hiatus hernia to rule out ulcerations, stricture, or neoplasm. He reports three patients with neoplasm of the lower esophagus and four patients with carcinoma of the stomach associated with hiatus hernia. If signs of strangulation are present, operation should not be delayed and resection should be done if necessary. The patient's condition may preclude repair of the defect at the same time, but this can be done at a later sitting.

The organs found in the hernia in our cases, either at operation or by x-ray, are listed in Table VIII.

There was no recorded follow-up in 60 per cent of our patients, so it can be assumed that the majority of these patients obtained some improvement from their recommended treatment which, for the most part, was purely medical. They were all advised conservatively and asked to return if no improvement was noted. Of the eighteen operations performed, fifteen of the patients obtained marked relief from their symptoms and only two

noted no improvement. One patient had two operations before the hernia was completely repaired. It is also very interesting that there was x-ray evidence of incomplete repair or recurrence in five patients, but in only two of these patients were there subjective complaints due to the recurrence. One patient died, a newborn with a tremendous congenital hernia, who would have died had the operation not been performed. Results in general with both medical and surgical treatment are, on the whole, rather good.

### Conclusions

1. One hundred and fifty-eight cases of diaphragmatic hernia are presented, 132 of which are esophageal hiatus hernias.
2. These hernias can be classified into non-traumatic (congenital and acquired) and traumatic (direct or indirect injury).
3. The highest degree of prevalence is in the older middle-aged groups and in the obese.
4. Symptomatology is extremely variable, and the condition is frequently referred to as the "masquerader of the upper abdomen."
5. Physical examination is usually negative except for slight or severe obesity.
6. Laboratory findings are usually noncontributory, although many times an anemia is present.
7. The diagnosis is made on the clinical picture and by x-ray.
8. It is frequently difficult to differentiate the cause of symptoms when there are associated x-ray findings present such as gall-bladder disease and duodenal abnormalities.
9. Treatment is divided into medical and surgical types. Those patients with mild or moderate symptoms are advised on conservative management, and those with severe complaints, if they do not respond, after a short trial on medical care are advised to have an operation.
10. Results of both surgical and medical treatment, if properly handled, are good.

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### AS WE SEE IT

(Continued from Page 1226)

ly in the absence of any Congressional move to veto them.

The difference between the propositions accepted and the one rejected is this. Those not vetoed are in accord with the Hoover Commission Report, and beyond that do not aim at anything other than increased administrative efficiency.

Rejection came when Mr. Truman offered a plan in direct contradiction to the Report's recommendation which won enemies in both parties by being a pretty transparent move to further the aspirations of the welfare staters.—Editorial, *Detroit Free Press*, August 19, 1949.

### TRUMAN CLINGING TO WELFARE PLAN

Congress hasn't heard the last of Government Reorganization Plan No. 1 to set up a Department of Welfare.

The Senate's turndown has not cooled President Truman's determination to put the proposal through. He will make another try to get approval.

The President disclosed this in a talk with Reps. Robert Crosser and Wayne Hays of Ohio. They conferred with him on Government reorganization plans.

"As long as Government reorganization can be vetoed by either branch of Congress," said Hays, "it will be impossible to effect economy in expenditures. It's the old story of lobby pressure. The lobbies go to work behind-the-scenes and kill these proposals. That happened when Hoover was President and what the Senate did on this proposal was more of the same."

"That's true," said Truman, "but they are not scaring me. If the Hoover Commission's magnificent report is to mean anything, it will have to be put into effect. I am going to keep on sending plans for that purpose to Congress. Whenever one is vetoed, I'll send up a revised plan in its place."—ROBERT S. ALLEN, *Washington Merry-Go-Round*, August 24, 1949.



# Nervous Indigestion

By Walter Lincoln Palmer, M.D.  
Chicago, Illinois

THE OLD ADAGE that "there is nothing new under the sun" is, in this atomic age, obviously not true, for we have witnessed the appearance of one breath-taking miracle after another. We have become weary of new things. Nervous indigestion, however, is not new, and there is no new method of treatment. It is, therefore, with considerable hesitation and many misgivings that I have undertaken to discuss this subject.

There are several compelling reasons for accepting the assignment. The first of these is the great frequency of the disorder; more than half of the patients coming to the physician with abdominal complaints have no organic basis for their distress. The second reason for discussing this subject is that a great deal can be done for these individuals; they make excellent patients, well satisfied and grateful. Thirdly, the early symptoms of numerous diseases are indistinguishable from those of nervous indigestion; it is most important to look for the organic disease in order to institute proper treatment as early as possible. If the diagnosis is really "nervous indigestion," the physician may proceed with appropriate therapy, but he should not be satisfied with his diagnosis until the symptoms have been relieved, for the "proof of the pudding is in the eating," and the physician while treating the functional disorder should always keep a "listening ear" for the overtones, the signs and symptoms of organic disease.

But before discussing treatment, it is necessary to pause briefly for definition of the disorder and for a consideration of the symptoms, signs, and diagnosis. Terminology is often difficult, and so I find no entirely satisfactory name for this syndrome. "Nervous indigestion" implies that the trouble is all nervous, which it is not, and indeed a true indigestion, which it is not. "Dyspepsia" is an indefinite term, but so is the disorder. "Nervous stomach" and "acid indigestion" are equally indefinite designations. "Irritable colon," "unhappy colon," "spastic colitis," "mucous colitis," and similar terms are all more or less satisfactory

or unsatisfactory, depending on one's point of view, but they all imply the existence of a disorder of functional origin without organic basis.

The symptoms are most varied in type and in severity: heartburn, belching, excessive abdominal fullness while eating or after eating, generalized or shifting abdominal discomfort, sometimes rather severe abdominal pain, usually located below the navel, relieved by defecation or flatus but sometimes induced by defecation. Excessive flatus, with rumbling and gurgling noises in the abdomen, is not infrequent. As a rule, there is a history of "constipation," defined by the layman in various ways. Usually he means that in order to have a bowel movement daily, or after each meal, or whatever his notion of normal bowel function may be, it is necessary for him to take a daily laxative of some sort, or at least one every other day, or large enemas at frequent intervals. If the patient is asked whether his stools are hard and dry, he usually replies: "No, I never allow them to get that way!" Thus, most patients give a history, if pressed, of passing mushy, unformed stools, watery stools, or formed stools of small caliber, true lead-pencil or ribbon-sized stools, resulting from the colonic hypermotility and spasm. Many patients with the most severe types of spasm and abdominal pain pass small hard marbles or the sheep-dung type of feces. Relatively few patients with functional bowel distress pass regularly the well-formed stools of good caliber, an inch or so in diameter considered to be normal. True constipation, as signified by the infrequent passage of large, hard, dry feces, is rarely seen in these individuals.

On physical examination it is usually possible to demonstrate a tender colon, particularly in the sigmoid and the transverse portions. This finding together with the distress described and the history of disturbed bowel function completes the clinical triad.

The diagnosis is based in part upon the picture described and in part upon exclusion, because the syndrome can accompany so many organic diseases, some of them silent, some of them giving symptoms simulating a nervous disorder, some of them of importance, and some of no consequence at all from the clinical point of view. The value of the routine physical examination, including the vaginal and the rectal examinations, the laboratory studies such as the blood count, uri-

Read at the eighty-third annual session of the Michigan State Medical Society, at Detroit, September 24, 1948.

analysis, gastric analysis, fecal analysis, and blood serology cannot be emphasized too strongly. Digital examination of the rectum should never be omitted. Proctoscopic inspection of the rectum and rectosigmoid should be carried out whenever possible, primarily for two reasons: cancer in these areas is common, frequently missed by the palpating finger and by x-ray, and it is relatively curable by surgery; ulcerative colitis may be recognized only by means of this procedure. Hemorrhoids are best diagnosed not by proctoscopy or by palpation but by inspection with the patient on his side, the buttocks drawn apart, and the patient bearing down as much as possible, an attempt at defecation producing eversion of the anal mucosa.

X-ray examination of the chest, gall bladder, esophagus, stomach, duodenum, terminal ileum, and colon (barium enema) should be done almost routinely in this group of patients. The tests do not in themselves provide a diagnosis of nervous indigestion, but the demonstration of normal structures is compatible with that diagnosis and provides some of the reassurance needed by the patient as an important part of his therapy.

The differential diagnosis includes the differentiation of the common diseases of the digestive tract such as peptic ulcer, gallstones, regional enteritis, and cancer. Not infrequently such disease is present; the physician is then confronted with the problem of appraisal, of judging which disorders are responsible for the symptoms, and which are in need of treatment. Thus an active peptic ulcer, as indicated by demonstration of a crater, requires treatment; a duodenal deformity may or may not be accompanied by ulcer symptoms and an active ulcer. Gallstones may be silent and have nothing to do with the dyspepsia; "biliary dyspepsia" is a myth, or perhaps it is better to say that it is nervous indigestion occurring in a patient with gallstones; it can be treated independently of the gallstones. There are numerous other organic processes in the digestive tract, discoverable by appropriate examination, but of no consequence in terms of symptoms. Most forms of gastritis are to be included in this category; the superficial, hypertrophic, and atrophic types seen by the gastroscopist may be disregarded in the treatment of the patient. Chronic cholecystitis and chronic appendicitis may likewise be ignored. Adhesions are of little consequence unless they

produce intestinal obstruction, complete or incomplete, evident by recurring attacks of rhythmical intermittent abdominal pain without diarrhea. Adhesions are not to be looked upon as a cause of chronic, daily recurring abdominal distress. Similarly, the various food allergies are, in my judgment, rarely if ever responsible for chronic day-to-day distress, although they may produce *acute* gastrointestinal disturbances.

The treatment of nervous indigestion begins, of course, with the anamnesis and continues through the various examinations. The astute physician studies the reaction of the patient and attempts to evaluate his personality even if no formal psychiatric history is written. It is often extremely helpful to take a psychiatric history, or at least a social history, in order to understand better the background of the patient, his trials and tribulations, and the manner in which he has reacted to stress and strain through the years. The abdomen has long been regarded as the "sounding board of the emotions," but the physician does not learn of the emotions by listening to the abdominal complaints unless his ear is pitched to the overtones. He must then take the time to hear the main emotional theme which can usually be elicited with a few appropriate questions asked at the proper time after a satisfactory and friendly rapport has been established. The physician must be alert to the possibility not only that the abdominal complaints may be of emotional origin, but that the emotional disturbance behind them may be very profound. Mild depressions, severe depressions, latent and overt schizophrenia, paranoia, hysteria, and the severe anxiety states, as well as the psychoneuroses, all come into the physician's office in the guise of nervous indigestion. They should be recognized if possible. Some of them are treatable in terms of modern psychiatric procedures; others are incurable. The physician, however, must attempt to treat them; he must deal with them whether they are curable or not. The therapeutic goal depends upon the patient and also upon the physician; the physician is obligated by his profession to do the best he can even though it is not perfection. The techniques of psychiatric therapy, however, may be read in volumes elsewhere; it would be futile to attempt to describe them here.

Diet therapy is important, but not *too* important. It is a mistake to direct an obsessive,



compulsive person into meticulous consideration of the number of prunes to be eaten each day. On the other hand, diet should not be disregarded, at least in the majority of patients. They expect a diet, and it does provide some excuse for improvement, as it were. Furthermore, there are differences in the laxative effect of different foods, depending upon the presence of chemical irritants to the bowel and the amount of undigested food residue. Skeptics regarding the role of such physiologic factors may be reminded of the well-known diarrheal effect of castor oil, beer, and molasses, to name only a few. I ordinarily use a diet sheet containing the various foods divided into groups so that the most irritating ones can be eliminated. Stipulated amounts of the less objectionable foods may be prescribed, especially of the cooked fruits and vegetables. Raw fruits and vegetables, beans, honey, molasses, candy, syrup, soft drinks, beer, pickles, spices, and such foods may be eliminated for a time at least. Coffee and tea should be reduced to a minimum. Tobacco is not a food; it does stimulate the digestive tract in some individuals and may be discontinued.

The goal of diet therapy is to provide such food to maintain proper nutrition (or to accomplish a desired reduction in weight) and at the same time to provide the correct amount of stimulation for the bowel. If the stool is unformed or narrow in caliber, too much irritant has been ingested; if the feces are large and hard, too little. The chief difficulty as a rule is not in regulating the bowel, but rather in re-educating the patient as to what is a normal and desirable bowel function. One may wait days for fecal matter to descend into the rectum since there is no "rhyme or reason" to the rate of travel in the normal colon. The number of bowel movements per day, week, or month is not important provided the consistency is satisfactory. The amount of fecal material is also not important; in fact, the more complete and hence the more perfect the process of digestion, the less the amount of residue to be expelled as feces. One must be on the alert, however, to detect the presence of fecal impactions. The patient may have a rectal dyschesia and be unable to expel the feces without the aid of a glycerin suppository, a small water enema, or perhaps a digital breaking up of the fecal masses followed by a large enema. Some time and patience may

be required for the re-education of patients who have lost the normal defecatory reflex.

Medication, like diet, is of secondary importance. Antispasmodics, such as belladonna, are of some value. Belladonna may be conveniently prescribed as the extract,  $\frac{1}{8}$  to  $\frac{1}{4}$  of a grain three or four times per day, or as the tincture, 5 to 10 m. three or four times daily. Sedatives are helpful for their general effect and also because of their quieting action on the bowel. Phenobarbital in doses of  $\frac{1}{4}$  to  $\frac{1}{2}$  grain three or four times daily is very satisfactory and can be given in combination with the belladonna. In patients with insomnia, the daytime administration of sedative may be sufficient to induce sleep at night; if not, additional doses of the same or a different hypnotic may be used at bedtime. Addiction is rarely a problem except in rather severely disturbed patients in whom the addiction becomes a manifestation of the intensity of the underlying emotional chaos. If this is not dealt with adequately, the patient clings to his addiction, for it provides a means of partial relief.

In conclusion, then, nervous indigestion is not a disease, but a syndrome, bizarre and indefinite. In a sense, it is the warning signal of a personality in distress. The correct evaluation and treatment of nervous indigestion is partly a work of science, partly a work of art. The physician who relieves the distress, who restores health, be it of mind or body or both, may be proud of his work and, like the true artist, gaze upon it with satisfaction. Leonardo da Vinci was both a scientist and an artist—an artist who worked with lasting materials. His paintings of the Last Supper and the incomparable Mona Lisa have come down to us through more than five centuries of human striving. Fifteen generations of men have lived, died, and been forgotten, but the Mona Lisa brings ever to life the name of Leonardo da Vinci. Physicians work with perishable human materials with the hopes and fears of men who are transient actors on the stage of life, but who are the makers of human destiny. Our handiwork will not be preserved for posterity; our men and women create the present and the future. They are our reward. The smile which brightens the face, enlivens the eye, and quickens the step of the patient relieved of nervous indigestion is our Mona Lisa, ephemeral to be sure, but, to the physician, warm and satisfying.

# The Art of Living

By Hugo Aach, M.D.

Kalamazoo, Michigan

**I**N AGES PAST, the Jews gave to the people of the world a set of laws. If the people of the world would abide by those laws, we would not be having the trouble that we have today. My subject, "The Art of Living," is based upon the Ten Commandments. What I say here applies to no particular individual but applies to all of us, including myself. The Ten Commandments, today, are as workable as they ever were. The only thing is that man must make them work.

## I Am the Lord, Thy God Which Brought Thee Out of the Land of Egypt, Out of the House of Bondage.

We may interpret this in our own field: that medicine grew from sorcery and quackery. Happily now, we are no longer bonded and fettered by sorcery and quackery, but have developed into the noblest of the professions. Let us trace some of the progress that has been made since I was a student; men who are middle aged have seen the entire aspect of medicine change within our professional lifetime.

In 1921 there were at least twenty-five or thirty-five cases of typhoid fever in the City of Kalamazoo; now we may have one or two cases a year. It is hard to teach the diagnosis of the disease today because of the lack of cases. Diabetic acidosis was usually a fatal condition, as was pernicious anemia. The meningitis mortality was huge. I can remember when Doctor Marsh, the internist at Ann Arbor in 1922, stated that insulin would never be practical. Pneumonia was a major problem, with a 20 to 40 per cent mortality. Many patients became delirious. Lead poisoning and kidney inflammation, namely, pyelitis, were common.

All of these problems are now solved or tremendously changed. Public health measures have virtually wiped out typhoid. Industrial hazards are disappearing to a large degree, and industrial safeguards have almost eliminated lead poisoning. Diabetes has been controlled by insulin. Pernicious

anemia can now be handled safely in the office or by the out-patient department, and so, as a rule, can pyelitis. Pneumonia has been changed from a dangerous disease to a relatively mild one. Interns now rarely see a delirious pneumonia patient. The mortality of meningitis has been cut to a fraction. Its terrible consequences, such as complete deafness, are almost non-existent except in neglected cases. Not only in the realm of internal medicine but in the realm of surgery, through such factors as nutrition and the use of life-saving drugs, peritonitis is a much rarer sequel. In the removal of bowel cancer, the antibiotics and sulfanilimides have aided greatly.

Increased knowledge of the glands of internal secretion and the use of substances derived from their secretions have made possible other advances. High blood pressure is now being attacked in certain instances by operation on the sympathetic nervous system. Physiology, radiology, biophysics, and biochemistry have all contributed enormously to a better understanding of the nature and treatment of disease. Out of the war came a great increase in knowledge of the use of blood, blood plasma, serum albumin, and the clotting elements in the treatment of wounds, infections, shock and burns. These are but a few significant advances in medicine and surgery, and their related specialties are going through a constant change.

Fundamental realignments are taking place: diseases which once carried with them a tragic mortality now carry a very low death rate. Operations which were once performed by a few great surgical adventurers are now being done even more successfully by many surgeons, but much remains to be done.

Surely we have come a long way from that House of Bondage; but on the other side of the picture, in 1946 in the city of Philadelphia there were 8,000 deaths from heart disease, another 3,600 people died of related diseases of the blood vessels and kidneys, and cancer killed 3,800. These dread diseases are at the top of the list of the big unsolved questions facing medicine. Only a beginning has been made in their understanding and treatment. They are all, largely, diseases of later life, and thanks to medical advances, the average life span has increased fifteen years in the last forty years.

Another big problem is this: In the year 1880,

President's Address presented at the annual meeting of the Kalamazoo Academy of Medicine, December 21, 1948.



there were 1,700,000 men and women in the United States over sixty-five years of age. There are now 10,000,000. The statisticians tell us that by 1980, this number will be nearly double. Unless the means can be found to keep this large group sufficiently well to enjoy life and to play an economically social and useful part in the life of each community, the country will have a heavy burden on its hands. The fact that medicine has a tremendous job before it needs no emphasis. The facts and figures speak for themselves. A well-informed physician will tell you that one of the medical profession's biggest problems is co-ordination of facilities and skill, but we should never forget that humanitarian ideals are as important as co-ordination of facilities and skill. In the old days, the patient expected his doctor to know everything needed for his welfare. Now the advance and spread of medical knowledge is so great that it is impossible for one person to master the whole field. That is why we are seeing more and more specialists in medicine. Yes, we have come out of the House of Bondage, but we have a long way to go.

### **Thou Shalt Have No Other Gods Before Me**

Medicine is a jealous taskmaster. It requires a man to devote his time and his efforts to constantly improving himself, for his profession, and the people whom he is to serve. If we weaken, if we let down for a single year or even a month, we slip behind. As I have shown, medicine has made many advances in the past twenty years. It will make a great many more in the next twenty. It behooves all of us to study, to work, to keep up for the sake of the people who are entrusted to our care. We must not let other Gods come before us. Medicine and only medicine should we think of. Money should never enter in. Medical men as a class may not become wealthy, but they give their children good educations and are not dependent in their old age.

Here is an illustration about money which is food for thought: In 1923 a group of the world's most successful financiers met at the Edgewater Beach Hotel in Chicago. Present were the president of the largest independent steel company, the president of the largest independent utility company, the greatest wheat speculator, the president of the New York stock exchange, a member of the President's Cabinet, the greatest "bear" in

Wall Street, the president of the Bank of International Settlements, and the head of the world's greatest monopoly. Collectively, these tycoons controlled more wealth than there was in the United States Treasury. For years newspapers and magazines had been printing their success stories and urging the youth of the nations to follow their examples. Twenty-five years later, let us see what happened to these men: the president of the largest steel company, Charles Schwab, lived on borrowed money the last five years of his life and died broke; the greatest wheat speculator, Arthur Cutten, died abroad, insolvent; the president of the New York Stock Exchange, Richard Whitney, was recently released from Sing Sing; the member of the President's Cabinet, Albert Fall, was pardoned from prison so that he could die at home; the greatest "bear" in Wall Street, Jesse Livermore, committed suicide; the president of the Bank of International Settlements, Leon Fraser, committed suicide; the head of the world's greatest monopoly, Ivar Krueger, committed suicide. All these men had learned how to make money but not one of them had learned how to live. Let not money be your goal. There should be only one goal for all of us, and that is, that we know what is best in medicine so that we can do our full share, in order that we may help alleviate the ills of humanity.

### **Thou Shalt Not Take the Name of the Lord Thy God in Vain.**

When things go wrong, we should not blame our fellow doctor, the hospital, the nurse or the individual who is helping in our office. Maybe, perhaps, the fault lies within ourselves, due to our own inadequacy. How many of us read medical periodicals regularly and attend all of the medical meetings that we should? Not only local medical meetings, but state medical meetings, national meetings, special meetings. How many of us in the last ten or twenty years have taken any postgraduate work? Yes, if we are only honest with ourselves, we can look back and say, the fault does not lie with someone else, the fault lies within ourselves. Improvements come in the practice of medicine and in hospitals. When we do not like what is being done to improve the practice of medicine, maybe we are defending our own inadequacies. Maybe if we all kept up, we would not feel that something sinister is being done to harm us, but that the trouble lies within

ourselves, and our salvation is to make ourselves better.

Recently, at one of our surgical staff meetings, without evaluating the merits of what was being discussed, which was for the improvement of the surgical staff, not one of the discussants mentioned the welfare of the patient; each was worried only about whose toes would be stepped on by whom. Maybe we should try to improve ourselves and make ourselves better. Therein lies our salvation.

### **Remember the Sabbath Day and Keep It Holy**

*For six days shalt thou labor and the seventh day shalt thou rest. Neither thy son nor thy daughter, thy manservant nor thy maidservant, nor thy ox nor thy ass, nor the stranger within thy gate, shall labor on the Sabbath Day.* This should be taken literally. However, it is my belief that it also has a modern meaning. We all should take vacations. I have never yet taken a vacation from which I did not come back full of zest, with the willingness and a desire to go to work. Further, it might be a good thing if all of us would take our wives out more to dinner, make life a little easier for them, after they have worked at home all day. It is the small things that count.

Another thing we should never forget is that we should grow up with our children. Our children are only young once. It is not only our duty but it is our privilege to grow up with them, and not wait until they have gone on, gone away from home to school, and wish that we had done this or that with our children. It is so much nicer to make life a little bit easier and more pleasant for the ones that we love. It is so easy for us to do it, if we will only do it. Remember, you cannot take it with you, and the time is shorter than you think.

### **Honor Thy Father and Thy Mother So That Thy Days May Be Prolonged and Thou May Live in Peace**

This should be taken literally, because those of you who still have your fathers and your mothers should do whatever you can to make life a little bit easier for them. Do the little niceties for them. Get them little presents. Take them out, so that when they are gone you will have no regrets and you will have done everything that you could possibly do for them. They are only here once.

As for the modern version of "Honor thy Father and Thy Mother," some of us older men were

talking one day recently, and some thought that perhaps the younger man today does not have the respect for the older man that we did when we got out of school. I know that when I came here the older men gave me inestimable aid, and I gained a respect for them and, frankly, I thought they knew a lot. My ideas never changed. Remember that when an individual graduates from school today, and has three or four years of training, he still has had very little experience. There is nothing that will take the place of experience. The older man, through his experience, has a wisdom that he is only too willing and only too glad to impart to the younger man, if the younger man will only heed and listen. Remember that small courtesies and niceties are appreciated by older men; many have told me so. No one should have too much esteem for himself. That esteem is only a figment of the imagination and of one's own self-importance. It takes time, I suppose, for every man to grow up and appreciate that experience does count. Hippocrates said, "Knowledge comes, but wisdom lingers." This is as true today as it was when he said it.

### **Thou Shalt Not Kill**

We should never be afraid of consultation. We should never be afraid to say that we do not know. After all, people have much more respect for us if we are not ashamed to say that we do not know. It is a bright person who knows when he does not know. Consultation is only for the good of the patient, and all of us are striving for that goal.

We also should not kill the respect of the public for us. When we are called we cannot have our office help say, "The doctor does not make calls on Saturday and Sunday." After all, germs grow seven days a week. There are times when we cannot make a call. We may be too tired, and this is a legitimate excuse, or there may be some other legitimate reason for not making a call, but we can recommend another man or two. We can furnish their telephone numbers and tell the individual that if he is unable to get help that he should call us back and that we will help them out even though we do not happen to do that kind of work. This is diplomacy and does not make enemies. People would appreciate it. After all, we should treat people the way we ourselves would want to be treated.



**Thou Shalt Not Commit Adultery**

This, to be sure, should be taken literally. I wonder, if Moses had had more experience and more knowledge in the science of heredity, if he would not have advised his people not to waste the seed. That is to say he would have taught his people to marry someone as good, physically and mentally, or better than themselves, so that they would enhance their seed and so make the race better.

In the modern sense, in Webster's Dictionary, adultery means to debase, to make impure. I wonder, if by seeing too many patients, we do not debase the practice of medicine. There is an old adage that "the more thoroughly one sees a patient the less patients he sees, and the more patients that one sees the less thoroughly he sees his patient." We should not simply give drugs without examining patients. We should be much more than a "glorified drug store." We have a noble profession to uphold. We cannot see too many patients and do good work. Never let us forget it. We cannot do as was recently done in a nearby city—send an individual into the hospital with a diagnosis of an incarcerated hernia on the right side and a strangulated hernia on the left side. How many physicians have ever seen these two conditions occur in the same person at the same time? This type of action is debasing the good name of medicine. It is not only impure practice; it is just plain dishonest. Such practices will not carry us very far.

**Thou Shalt Not Steal**

We have to be honest with our fellow man and with ourselves. When physical examinations are done without having the patient remove his clothing, or, what is worse, when one's office help does the examination, with the physician not even seeing the patient, this is dishonest—it is just plain stealing. We cannot make excuses for this kind of business. It is not the way we were taught to practice medicine. If we give injections for this and for that when there is not the slightest evidence of scientific worth for the product, is that honest? When patients come back time and again to receive their injection, and never see the doctor but only the female assistant, and this goes on for months—I ask you, how many of us were taught to practice medicine in this manner? Today with people as enlightened as they are, how long do you

think the profession will be able to stand this kind of practice? Not long, I hope. Anything and everything not good that is done by a few of us rebounds on all of us. People do not remember the good as long as they do the bad. Public relations committees would not be necessary if we all did the right thing. The public relations committee is a frank admission that all is not well, that we are making excuses for ourselves. I ask you to think this over. These are not nice things to say, but they are truths and we cannot deny them. I am ashamed of them as much as you are.

When people come to us for medical care, they have the right to expect an honest examination and good care. Anything short of this is bad and is dishonest. It will break the confidence in the physician more than anything else I know of. Is it a wonder that some people are not friendly to our profession! Bad and dishonest practices will certainly not stave off or hinder socialized medicine. I think probably that we shall have socialized medicine, because, if for no other reason, the whole world is becoming more and more paternalistic and people want so-called security. I do not mean that we, by doing what is right, can stave off socialized medicine, but we perhaps could salvage a somewhat better way to practice in a socialistic regime, if we all did what was right so that we would all be respected. We certainly, by not doing what is right, are gaining nothing for ourselves or the people whose interests we should have at heart.

**Thou Shalt Not Bear False Witness  
Against Thy Neighbor**

Talking about the other fellow, cutting words—these are not nice things to say, but they are the truth. How many times have we all sat about, in various rooms of the hospitals, talking about this man or that man, or this group of men or that group of men? Remember that every knock is a boost. Whether you agree with the methods or not, anything that is done in either hospital in this city, I know, is done with the benefit of the patient in mind; and remember, as I stated in discussing the Third Commandment, maybe our faults lie within ourselves. So, rather than bear false witness against your neighbor, sometimes if you cast bread upon the water you will receive cake back.

It is all right to criticize but the way we should

criticize is not with destructive criticism but only with constructive criticism. That is the way we progress. It is so much easier to say something nice than something that will hurt some one's feelings. It leaves a much better feeling with the other individual to have something nice said about him, rather than something mean, something sharp and cutting. We have a lot to be ashamed of, and if I cannot trust you and you cannot trust me and we cannot trust each other, how in the world can we expect the public to have confidence in us and our profession? Let us all start the new year with a resolution to work together for the good of all, and let us not say cutting and mean and base things about one another or this group and that group or this hospital and that hospital.

**Thou Shalt Not Desire Thy Neighbor's Wife, nor His House, nor His Field, nor His Manservant, nor His Maidservant, nor His Ox, nor His Ass**

In other words, let us not be jealous of what the other man has. If we do our work and do it properly, we shall get our just reward. Remember that the world pays for a job well done. Sometimes a man works all his life, grows old and never gets the things that he planned to get, and never knows the reason why. Yet the reasons are simple: too often he thinks only in terms of getting. Too often he only takes; he seldom gives. This is a life of giving and getting, but the element of giving comes first.

Then, the vast majority of men never think of mastering their jobs. They never try to do their work in a way that is better than is just common. Too many do their work in volume and time just to get by. That is why the good things in life they are expecting never come. The world pays for the amount of work and the kind of work we do. I do not mean only in terms of money. It pays less for this kind and more for that kind, and pays with fair exactness. When it finds that we do a fine thoughtful job, it pays us well and pays us regularly and adds, in time, the extras. But if it finds that we do our work carelessly or casually or grudgingly, as though it weren't worth the doing, we get paid in kind. We never get the things we want. The world pays for masterpieces and has no patience with lesser things, knowing that many men succeed, become mastercraftsmen, famed machinists, famed chemists, famed accountants, famed office executives, famed lawyers, and

master physicians, famed in work which some do in mediocre fashion.

In closing, let me say that we should remember our heritage, that we have advanced far in the science and skills of medicine, but that we should never forget humanitarian ideals, and even though we have come a long way from the House of Bondage, we still have many things to do.

Remember:

- That we should have no other gods than medicine and should constantly strive to improve ourselves.

- That we will not take the name of the Lord thy God in vain and will not blame others for our own inadequacies and will remember that our salvation lies in making ourselves better.

- That we should take vacations and do nice things for the ones that we love.

- That we all should honor our fathers and mothers, the older physicians and, in fact, all elderly people.

- That we should never kill the respect of the people for our profession and that we should have consultations freely when needed.

- That we will not debase and make impure the practice of medicine by seeing too many patients or by giving drugs without examining patients.

- That we will be honest with ourselves and our fellow men.

- That we will not bear false witness against our neighbor, by saying unkind cutting words and making accusations that are unfounded; that we will criticize only in a constructive manner so that we will progress for the good of mankind.

That we will give of our best in all that we do, rather than just taking all that we can.

Then, gentlemen, we will have learned the "art of living." But we also will have mastered the art of living if, in the words of the greatest teacher of all, Jesus Christ, we will do unto others as we would be done to.



#### "FREE" HEALTH SERVICE

*It's human nature to want something for nothing. But it seldom happens.* "Free" health service is anything but free. It costs the worker money in payroll deductions, higher prices, higher taxes and, perhaps, in a lower standard of medical care.

If this is the land of the "free" a lot of doctors and patients must be in the wrong country.—*Chicago Journal of Commerce*, June 15, 1949).



# Practical Office Procedures in Gynecology

By Walter J. Reich, M.D., and  
Mitchell J. Nechtow, M.D.  
Chicago, Illinois

AT THE COOK COUNTY Hospital Gynecologic Outpatient Clinic, we see hundreds of patients who are diagnosed, treated and followed up for various gynecological disorders. By necessity, the instruments and methods employed are of the simplest possible type and very practical. The same procedures as used at the clinic are also employed on our private patients.

We will present in this paper a combination of ten practical procedures and common conditions which are often encountered. Following a short introduction into the subject of sterility, we will discuss our first procedure.

A thorough and complete subjective survey of the sterile patient is of paramount importance. One should look for systemic diseases like myxedema hyperthyroidism, general debility, hirsutism and others; get a complete history of menstrual irregularities, if any; inquire about previous operations on the pelvic genitalia or appendectomy with drainage which may cause mechanical or inflammatory tubal changes; check the history for mumps with possible oöphoritis and resultant anovulatory menstruation; recall that acquired dysmenorrhea and metrorrhagia may mean endometriosis; and ascertain the patient's occupation—whether she handles radium paint in a watch factory or works as an x-ray technician.

A general physical and a complete gynecologic examination should be done, including the physical examination of vagina and cervix; one should look for cervical diseases such as eversions, ectropions, polyps and endocervicitis which are the frequent causes for infertility. The uterus must be checked for any neoplasms, position and consistency. The small hypoplastic uterus is not infrequently the cause for infertility and, if it is impregnated, may lead to habitual spontaneous abortions. Polycystic ovaries may produce anovulatory

menstruation; resection will often lead to restoration of normal physiology.

Ten practical procedures follow:

1. *The Rubin Test*, or the insufflation of the fallopian tubes for patency, is an essential test in the study of sterility. It is an absolute "must." It should be done about one week after cessation of the period. The air pressure may open the fimbria if they are not sealed too well. We use a simple Neal canula attached to a blood pressure apparatus. The holes in the canula should be checked because boiling of the canula may deposit minerals and plug the holes, giving a false negative test. With the canula snugly in the cervical canal and the tenaculum applied transversely on the upper lip, air is pumped with the blood pressure bulb. We pump to between 150-200 mm. Hg. If the mercury column of the manometer drops suddenly to about 90 mm. Hg and then gradually drops lower, the tubes are open (positive test). If the pressure remains stationary at 150-200 mm. Hg, the tubes are closed (negative test). If the pressure drops slowly, the tubes may be partially open or there may be a spasm. One must not pump too much air; it is potentially dangerous—air embolism. If the results of the Rubin tests are not conclusive, we follow up in one month with utero-salpingography to study the exact site of obstruction.

One should not perform either test in the presence of acute or subacute pelvic inflammatory disease, because the disease may flare up and lead to pelvic peritonitis. We have had the opportunity of following one such patient subsequent to lipiodol injection of tubes. She made an uneventful recovery. It is the only one we have seen in 400 cases.

2. *Endometrial biopsy* is often found to be the missing link in the study of sterility. This is also a "must." We have seen many women come to our clinic who have had all tests made, with the exception of the study of the endometrium, and it was found to be *anovulatory*.

The time for the biopsy, which is done in the office, the clinic or at the out-patient department of a hospital, is at the height of the secretory or pre-gestational phase, or three to five days before the onset of the menstruation. We do not use suction. The cervix is grasped with a tenaculum and painted with any suitable antiseptic; the

From the Department of Gynecology and the Gynecologic Clinic of the Cook County Hospital, and the Cook County Graduate School of Medicine, Chicago, Illinois.

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cervix must not be pulled; such pulling will cause pain. The canal can be dilated with a probe or a small Hegar dilator; if the canal is open enough, this procedure will not be necessary. We use a Randall or Novak endometrial biopsy curet. It is inserted gently until the fundus is felt. Hugging the uterine wall, the curet is drawn out scraping. In this manner a substantial strip of the endometrium will be obtained. Two or three strips should be taken at different sites. One should blow out the tissue with a 5 c.c. syringe into a specimen bottle containing 10 per cent formaldehyde solution.

If the patient has normal physiologic ovarian function with ovulation and corpus luteum formation, she will have typical secretory endometrium with long tortuous and abundant glandular growth. If she does *not* ovulate, she will present a round hypertrophied endometrium, the "Swiss cheese" type, which is anovulatory endometrium.

3. *Pre-ovulatory dilatation* of the cervical canal is done with the hope of mechanically enlarging some of the narrow and small cervical openings, thereby increasing in some cases the possibility of impregnation. This is carried out just before ovulation time in the mid-period.

4. *Huhner test* must be done on every case. Within an hour after coitus the patient is examined. A dry speculum is inserted, and the semen is aspirated with a dry, sterile pipette and bulb, from the cervical canal and the posterior fornix. The semen is then examined under the microscope for spermatozoa. Their viability in the vagina and cervical canal is thereby determined.

5. *Electrocauterization of the cervix* for chronic endocervicitis, with or without eversion or ectropion, is the choice treatment in our experience. We have tried all other methods, but the former yields the best results. Multiple punch biopsy is done on all cases of erosion or eversion prior to cauterization. We employ a simple cautery machine with a nasal tip electrode. The treatment is painless, safe and effective. The preferable time for cauterization is just before the midcycle. The cautery tip must not be too hot; it should be of dull cherry red heat, and with the goose neck lamp or direct light turned off. If it gets too hot or white as it does with the light on, it will burn

the tissue too deeply and may predispose to hemorrhage. The cervical canal must be cauterized first. It is here that the pathologic condition begins, and unless the endocervix is cauterized, the erosion will recur. The ectropion is simply the result of the endocervical pathologic process.

After the cautery is tested for proper heat, it is cooled off by emerging it into cold water. The cautery is inserted "cold" into the cervical canal; this will obviate accidental burns of the vagina while going into the cervix. The vagina is very sensitive to heat, and the patient will object to this because of marked pain.

The canal is cauterized at 6, 12, 3 and 9 o'clock sites; this will usually destroy most of the diseased glands and epithelium. If the canal is large, as in many multiparous women, then one should go around the entire endocervix until all of the tissue is cauterized. When the tissue is somewhat "cooked" or turns yellowish-gray, that is a sufficient degree of destruction or burn. One must not burn too deeply because of potential stricture due to fibrosis of the cervical tissue and a possible resultant leukometra, hematometra or pyometra.

After the canal is cauterized and if there is an accompanying eversion or ectropion ("erosion"), the latter is touched up with the flat side of the cautery tip. Nabothian cysts are punctured with the cautery. Oxycel or gelfoam is applied to the cauterized area. A tampon is inserted to soak up any discharges so as not to stain the patient's underclothes. However, it should be removed within twelve hours.

The patient is instructed not to douche or engage in any sexual activity for seven to ten days; either of these may break off the slough and create bleeding. She must return to the office weekly for four or five times, when the cervical canal is dilated, using a simple cotton applicator or a small probe or a dressing forcep. It takes anywhere from ten to twelve weeks for complete healing of the cervix. We rarely need to recauterize; but if such an occasion does come up, one should wait three months before doing the procedure. It is of interest to note that in our series of over 2,000 cases of cervicitis, a large number conceived soon after cauterization, whereas they were infertile for months to years prior to the procedure.

6. *Trichomonas vaginitis* is the most common etiology for leukorrhea. The yellowish bubbly dis-



charge is usually quite profuse, and when examined on a hanging drop, the active trichomonads become readily visible. The hanging drop is made by using a drop of saline or warm tap water on a cover slip, mixed with small amount of the discharge. The mixture should not be too thick. Some is placed on a grooved slide and examined with a high dry power lens. We do not stain the mixture. When the diagnosis is established, the following therapy is instituted. The vagina is washed thoroughly with liquid antiseptic detergent (Parke, Davis and Co.), one part to three parts of water, and then it is dried. Then we insufflate, with the speculum opened in the vagina to avoid air embolism, a mixture of 20 per cent argyrol, 40 per cent vaolin and 40 per cent B. lactose (argypulvis—A. C. Barnes and Co. ). The patient is given a sanitary pad to avoid staining. At home she takes an acidifying douche (2 tablespoons of white vinegar to 2 quarts of warm water), and following the douche she inserts a capsule deep into the vagina containing 2 grams of the above formula; these are called argypulvis capsules. Before insertion of the capsule, the patient is advised to perforate each end of the capsule three times, using a safety pin, and then dip it in hot water momentarily; this will facilitate dissolution of the capsule.

If after a cure the patient returns with an active case, one should check for foci of reinfection. These may be in the urinary bladder. Skene's ducts, Bartholin glands, rectum or cervix, from digital contamination or bedpan splash; while in the husband, the prostate, prepuce, bladder or urethra may be the sites.

7. *Monilia vaginitis* is another annoying form of vaginal discharge. Pruritus and leukorrhea are especially predominating symptoms. Monilia is quite prevalent during pregnancy, because the fungi grow well on a glycogen medium, and since there is a marked increase of glycogen in the vagina during pregnancy, the former grow abundantly. The typical white grayish plaques (thrush) cover the vulva, vagina and cervix; when these are wiped away, small capillary oozing will ensue. The diagnosis is established by the hanging drop method, as described above under trichomonas. The finding of elongated, segmented, and thin bamboo-like mycelia with buds are diagnostic for moniliasis.

The management consists of washing the vulva and vagina with liquid detergent as above and applying freely an aqueous mixture of 1 per cent aqueous gentian violet and 1 per cent acriflavin. This must be repeated two to three times weekly for good results. The patient takes sodium bicarbonate douches at home. We carry out this regimen during pregnancy, and to date we have seen no complications of any kind.

8. *Intractable pruritus vulvae* is a distressing and very annoying disorder. These patients make the "rounds" to the dermatologist, the endocrinologist, the roentgenologist and the gynecologist. About seven years ago we reported fifteen patients treated with the injection of procaine and ethyl alcohol in oil. These cases do not have any demonstrable etiology such as kraurosis vulvae, leukoplakia, trichomonas, monilia or lichen planus. The cause is not understood, but there is probably some cutaneous nerve disturbance, and it becomes a vicious cycle of itching and scratching. We are soon to publish our supplementary report of over 150 cases which yielded good results in all but three cases.

Zylcaine formula (Abbott)—procaine, 1.5 per cent; butesin, 6 per cent; benzyl alcohol, 5 per cent, and peanut oil, Q.S.—is used to block the vulva in a rectangular area. A procaine wheel is made at each of the four corners of the labia majora; with an 18-gauge spinal needle, 10 c.c. of this "oil" are injected deep into the labia longitudinally about  $\frac{1}{4}$  of an inch from the surface of the skin; 5 c.c. are used across the rectovaginal septum, and 5 c.c. transversely above the clitoris. Prior to the injection the hair is *not* shaved; it is simply washed with soap and water. We have had no sloughs, no complications aside from two allergic reactions to the oil. It takes anywhere from one to ten weeks for a cure or marked improvement.

9. *Condylomata acuminata* of the vulva, perineum and vagina and urethra are not infrequent. They may be multiple and discrete or confluent. Formerly the therapy was rather bothersome, ranging from medicaments to radium. Now the use of 25 per cent podophyllin ointment in a hydrosorb base is quite effective. The ointment is applied to the warts; the surrounding tissue is protected with zinc oxide ointment or collodion. The podophyl-

(Continued on Page 1306)

# A New Treatment of Varicose Ulcer

## Report of Eight Cases

By Lewis Green, M.D., and  
Alfred A. Klein, M.D.

Detroit, Michigan

**V**ARICOSE ulcers are considered the most serious complication of varicose veins. They appear on the lower third of the leg, usually on the medial aspect. They are usually painful, and many times cause great disability and loss of productivity.

The treatment of varicose ulcers has always been a challenge to the medical profession. The numerous and varied forms of treatment that have been advocated and practiced speak for the poverty of cures. Numerous local applications have been tried with discouraging results. Some investigators have reported good results with applications of chlorophyll, tyrothricin, blood and plasma. Saphenous ligation, the use of occlusive compression bandage, the Unna boot, and other treatments have shown some value in the treatment of varicose ulcers. The use of mecholyl iontophoresis has been successful with some. It is interesting to note that sympathectomy has also been performed in the treatment of varicose ulcers.

Discussing the pathology and treatment of indolent ulcers of the leg, Heller considered local applications of minor value. Quoting Anderson, he stressed the relative unimportance of local antiseptics in healing infected wounds as against general measures designed to increase tissue immunity. Regarding varicose ulcers, Turnbull believes that the impairment of circulation due to valvular insufficiency in the veins is not enough to cause necrosis of the skin, and he suggests allergy as a factor in the production of surface ulcers, with the blood vessels acting as a "shock system." He states that inflammation of the endothelium with concomitant reaction in the vascular and elastic tissues of the vessel walls could be the origin of varicose ulcer.

It is our belief that allergy plays an important part in the development of varicose ulcer. Venous stasis is the primary factor. According to McPheeters, stagnation of blood serum in the tissues

is the underlying cause. When an ulcer occurs, it grows in size and is frequently accompanied by eczematous dermatitis and edema. It is possible that an allergen is present in the dilated capillary bed and is not carried into the general circulation quickly enough to prevent local damage to the skin. The condition is probably aggravated by the production of reflex venous spasm, further obstructing the return of venous blood and causing a greater degree of edema in the foot and leg.

In our experience almost every individual who suffers from varicose ulcers also suffers with a general allergy or local intolerance to medication. It is common experience that most patients are barely tolerant to any but the mildest local applications. Considering the great amount of work that has had to be applied to the treatment of varicose ulcers, and the indifferent results obtained, it has been more than gratifying to observe how readily the varicose ulcers in our study have improved with the use of antihistaminic agents.

The first patient under our care presented herself with a large varicose ulcer and severe dermatitis medicamentosa surrounding the ulcer. The ulcer had been present for two months and was treated with many types of local applications. She was given tripeleminamine hydrochloride (pyribenzamine) in doses of 50 mg. four times daily and advised to discontinue all local treatment. Pain and dermatitis disappeared rapidly, and at the end of five weeks the ulcer was completely cured. Now, more than a year later, there has been no recurrence.

Since the above experience, the same treatment has been used on nine other cases. Patients were kept ambulatory, and a cure was obtained in seven cases, while two are still under treatment. Sensitivity to local therapy was very evident during treatment, even to such mild ointments as petrolatum and boric acid ointment. One patient evinced definite local allergic reaction to chlorophyll ointment. One was extremely sensitive to penicillin ointment and to the injection of penicillin procaine. One patient developed a severe dermatitis which was proven to be due to the use of an elastic bandage.

Because of these experiences we instructed patients to refrain from local therapy, but they resisted this because of pain. We therefore compromised by permitting the use of a very small amount of ointment, only sufficient to cover the ulcer itself.

Presented before the staff of Florence Crittenton Hospital, Detroit.



TABLE I

Patient Age	Duration of Ulcer	Previous Treatment	Description of Ulcer	Present Treatment	Result
G. S. age 54	2 months	Various ointments.	5 x 5 cm. Bullous dermatitis.	Veral jelly. Treated 5 weeks. Tripeleennamine HCl 200 mg. daily.	Healed. No recurrence after 13 months.
A. B. age 56	4 years	Veral jelly. Elastic bandage.	3½ x 2½ cm. and 2½ x 4½ cm. Edema. Dermatitis.	Veral jelly Tr. HCl 200 mg. daily. Treated 4 weeks.	Healed. No recurrence after 9 months.
G. P. age 50	2 months	Various ointments.	2½ x 5 cm. Bullous dermatitis.	Petrolatum. Tr. HCl 200 mg. to 300 mg. daily. Treated 6 weeks.	Healed. No recurrence after 6 months.
D. A. age 60	2 years	Ointments including penicillin and thyrothricin.	Multiple—10 x 10 cm. Bullous and eczematous dermatitis. Severe edema infection.	Sensitive to all local application. Tr. HCl 400 mg daily.	Healed. No recurrence after 4 months.
M. W. age 42	6 years	Saphenous ligation. Skin graft. Intolerant to all local treatment.	Right leg 2½ x 2½ cm. Left leg 2½ x 3½ cm.	Tr. HCl 500 mg. daily.	Right healed in 4 weeks. Left skin grafted after 6 weeks. Taking Tr. HCl, doing well.
H. E. age 58	6 years	Veral jelly. Varicose vein injections.	2½ x 6 cm.	Veral jelly. Tr. HCl 300 mg. daily.	Healed in 6 weeks.
J. Z. age 58	9 years	Sulfa and other ointments.	Multiple lesions both legs.	Petrolatum. Castor oil. Tr. HCl 400 mg. daily.	Healed in 10 weeks.
S. Mc. age 60	6 years	Various ointments. Varicose vein injections.	Ulcer 2½ x 3 cm. Edema. Phlebitis Dermatitis.	Petrolatum. Tr. HCl 300 mg. daily.	Healed in 6 weeks. No recurrence after 6 months.

It was also found of benefit to use a dusting powder (zinc stearate) on the surrounding skin.

In the eight cases completed, the length of time the ulcer had existed was from two months to nine years. Previous remissions had been rare. The size of the ulcers ranged from 2.5 by 2.5 cm. to others which measured 10 by 10 cm. The shortest time for healing was four weeks and the longest was ten weeks. None of the patients were kept in bed or encouraged to rest. Edema and pain subsided most rapidly, but the dermatitis persisted after healing of the ulcer.

To summarize, eight patients were treated for varicose ulcer with reference to a possible allergic factor. Tripeleennamine hydrochloride was given in doses of 200 to 500 mg. daily. Although good results were obtained in the cases treated, the number of cases is not sufficiently large to warrant a conclusive opinion. The method of treatment is so simple, compared to other forms of treatment, that it should at least be given a trial before or with other treatment.

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# The Evaluation of Post-menopausal Bleeding

By Walter J. Reich, M.D., and  
Mitchell J. Nechtow, M.D.  
Chicago, Illinois

THE EVALUATION of uterine bleeding after or during menopause offers a challenge to the diagnostic acumen of every physician, be he in general practice or in gynecology alone.

The patient is often subjected to various types of trial and error treatments; until it is too late for effective therapy.

At the Cook County Hospital and the Gynecologic Clinic we strive to teach the interns, the residents and the graduate students that bleeding in the menopause or after is carcinoma until proven otherwise.

Education must be extended both to the doctor and to the patient as to the importance of early diagnosis of malignant lesions of the female genitalia. We impress the patient that she must be examined every six months for any possible changes which may occur in her genitalia. A few minutes of conversation in the office, well worded in simple layman's language, will teach the patient, and she must convey the same message to other women, be it at home, church or women's clubs.

Carcinoma of the cervix or of the cervical canal constitutes the commonest malignancy which we see at the hospital and the clinic. The most frequent single complaint or combination is vaginal spotting, sanguinous leukorrhea, contact bleeding in various degrees, from scanty showing of blood to profuse frank bleeding. Not infrequently the patient presents herself for an examination, and, on routine speculum visualization of the cervix, an ectropion or an eversion is noted. This lesion cannot be diagnosed grossly as benign or malignant. A punch biopsy in three or four different areas must be taken for microscopic study. These "innocuous"-appearing cervical "erosions" must not be merely observed and then treated with various medicaments, packs or electrocauterization, because they may be malignant, either diffusely in the entire cervix or in small areas referred to as carcinoma *in situ*.

Read at the eighty-third annual session of the Michigan State Medical Society, Detroit, September 24, 1948.

From the Department of Gynecology and the Gynecologic Clinic of the Cook County Hospital, and the Cook County Graduate School of Medicine, Chicago, Illinois.

We frequently see patients who are affected by advanced cervical carcinoma, and the history many times is almost incredible: these far gone patients have been under the care of physicians for periods of several weeks to several months and they have not been examined vaginally; or, if they were, the speculum was not used. They were treated "sight unseen."

Furthermore, these patients were given pills, tablets, "shots" and vaginal packs, and were told that they were going through a "change of life," that it was a natural process and they should not worry about it.

When hemorrhage becomes profuse and home management is not possible, then they are brought to the hospital and a diagnosis is established. The salvage percentage in these cases is very low or nonexistent. Some patients tell us that they fear to hear the "worst" and stay away from the medical man.

From the above it is quite obvious that education must be far and wide to bring the patient to the physician, and he must be alert and prepared for establishment of the diagnosis.

Malignancy of the body of the uterus may be insidious and not diagnosed as readily as the former type. It is less frequent than the cervical carcinoma, and in our clinic the ratio is about one to ten. The symptom of metrorrhagia or an acquired sanguinous leukorrhea must not be disregarded. A diagnostic curettage must be done to establish the diagnosis.

The use of large doses of stilbestrol and other estrogenic substances creates a new diagnostic problem. A patient who does not menstruate in the menopausal age may complain of associated vasomotor disturbances, such as hot and cold flashes, nervousness and other symptoms, and may be given the above medicaments. She may begin to bleed; a doctor may ascribe the bleeding to the hormone stimulation of the endometrium, and many times he is right. However, occasionally there may be a coexisting carcinoma of the corpus which becomes activated by the hormones. A curettage should be made to establish the diagnosis. We like to wait one to two weeks after the withdrawal of the hormones before doing the curettage, because the stimulated postmenopausal endometrium, which is actually benign, may simulate malignant activity.

The curettage must be thorough and systematic;



the cornual areas should be scraped. We have seen cases in which the diagnostic curettage was negative but the patient continued to bleed. A total hysterectomy was performed, and on gross section of the specimen a small malignant area was found in the cornual site.

Sarcoma of the uterus is comparatively rare. At the Cook County Hospital the incidence is about .5 to 1 per cent. The symptoms and signs are similar to carcinoma of the uterus, but those sarcomas which we have seen were accompanied by myomas of the uterus, and some of the submucous myomas undergo sarcomatous degeneration. The diagnosis is usually suspected but only established following the removal of the uterus. However, we reported some three years ago a case of chronic uterine inversion with fibrosarcoma. A biopsy preoperatively established the diagnosis.

Cervical polyps may cause bleeding in the menopausal patient. The diagnosis is readily established by palpation and speculum visualization. Biopsy should be done. Occasionally prolapsing sarcomatous growths through the cervix may appear like simple polyps.

Benign endometrial polyposis is another cause for possible bleeding in this age group. A curettage and a microscopic study will establish such diagnosis.

Myomas of the uterus, especially of the intramural or the submucous variety, may cause bleeding. Our oldest patient who had profuse vaginal bleeding was seventy-four years of age. The submucous fibroid may be diagnosed by probing the uterine cavity or when doing a curettage. The instrument will go over a "bump." The rest of the uterus on bimanual examination may be symmetrical or smooth.

Menopausal vaginitis is one of the commonest benign entities which may cause spotting. Here the vagina is atrophic and smooth; the rugae are lost and there are many petechial areas. The latter when rubbed will ooze blood.

Feminizing ovarian neoplasms, the granulosa cell and the theca cell tumors with endocrine activity, in which estrogenic substance is liberated, will stimulate the endometrium and may re-establish the menstrual bleeding. The patient who ceased menstruating for months or years and who returns, saying, "I am getting young again, I am

flowing like a young woman," should alert the physician as to the probability of a feminizing tumor of the ovary. Bimanual examination may reveal, but not always, an enlarged adnexal tumor.

Blood dyscrasias, such as thrombocytic purpuras, as well as leukemias, pernicious anemia and severe hypertension may also cause uterine bleeding.

### Summary and Conclusions

1. Bleeding in the fourth decade and later must be considered as due to malignancy until proven otherwise.
2. Education of the patient for regular examinations every six months is imperative for early diagnosis of carcinoma.
3. The physician must be alert as to the current diagnostic aids for early diagnosis of cancer, be it by biopsy, curettage or cytologic smear study.
4. Patients should not be treated "sight unseen."
5. Bimanual examination is not complete without speculum visualization of the cervix.
6. Estrogens and stilbestrol should be used sparingly.

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### THE SIMPLE LIFE FOR MISTER ATKINS

When Tommy Atkins (after gin)  
Thinks he needs an aspirin,  
What does Tommy Atkins do?  
Tommy lines up in a queue.

Tommy takes his place in line  
Before the nearest M.D. sign  
With others, whose assorted ills  
Call for elixirs and pills.

Tommy thinks it's fine this way;  
He never, never has to pay—  
Just saves his cash to buy more gin,  
Then queues up for more aspirin.

O, don't you think life must be great  
In Tommy Atkins' welfare state,  
Where Tommy sins and takes his pill.  
And vulgar Yankees foot the bill?

—Chicago Tribune, September 2, 1949

# Safety Factors for Radium-containing Static Eliminators

## *Used in Printing and Allied Industries*

By K. E. Corrigan, Ph.D., H. S. Hayden, Ph.D.,  
and J. O. Reed, M.D.  
Detroit, Michigan

SINCE radium-containing static eliminators have come into quite general use in printing and allied industries, it is highly important that necessary safeguards be established to prevent undue exposure of personnel to the energetic radiations emanating from these instruments.

Recently our laboratory was requested to make radiation safety measurements around a printing press on which two static eliminator bars, said to contain 50 micrograms of radium element per linear inch and each 20 inches long, had been installed. Using portable instruments, it was found that the gamma ray intensity at the operator's position was within safe limits, being of the order of 5.5 milliroentgens per hour. The beta ray intensity, however, could not be measured accurately since it was beyond the range of the instruments available, but it was unquestionably excessive. It was also learned that the operator may, at times, occupy other positions around the press. In one of these, from which he watches the progress of his numbered sheets through the process, his face was shown to be 8 inches from the ends of the two bars and about 14 inches from the center of the one which was turned directly toward him. There could be no possible question of the excessive exposure in this position. The third position which he occupies part of the time was such that his face was 30 inches from the open side of one of the bars and was again exposed to excess beta radiation. The bars were then removed from the press and brought to this laboratory for more detailed investigation.

On the general subject of the human body tolerance for radiation exposure, two types of exposure (and, in general, three kinds of radiation) must be considered: (1) chronic exposure, in which the entire body is subjected to low intensities

of penetrating radiations, such as gamma or x-ray, and (2) acute local exposure, in which the hands, face, eyes, or some other limited area may be exposed to a fairly high level of radiation for a short period of time. Both offer possibilities of serious radiation injury.

The source of the radiation in the instruments with which we are concerned is radium and its disintegration products. Radium is a metallic element which has an unstable nuclear structure and breaks down spontaneously, giving rise to a series of other atoms which are also radioactive. The first step in the series is the explosion of a radium atom to give an atom of radon and the nucleus of a helium atom. This latter is called an alpha particle. Radon in turn breaks down spontaneously to give rise to another alpha particle and another radioactive atom called radium A. Radium A, which is a heavy metal, again gives an alpha particle and is transmuted to radium B, another metal similar to lead, which in turn has a nuclear explosion giving off a beta particle and is transmuted to radium C, which is similar to bismuth. After several more steps it ends up as a form of lead which is not radioactive, but at each step alpha or beta particles and gamma rays are given off.

When radium is sealed in a tight container with a thin cover that will permit the escape of the alpha, beta and gamma rays, these radiations will continue to be emitted by the preparation at a rate which can be considered constant in terms of human lifetime. It is important to note, however, that the container must be absolutely tight, for if the radon gas escapes, then the sequence is broken and two undesirable results will appear: (1) no useful radiation will be given off by the instrument which loses its radon, and (2) all of the rest of the radioactive series will be deposited wherever the radon collects. If radon is inhaled, radiation injury to the lungs may result and over a long period of time is known to produce malignant degeneration. The heavy metal radioactive elements which result from the disintegration of radon can be deposited in the bones with disastrous results like those in the well-known cases of the dial painters.

### Gamma, Alpha and Beta Ray Activity

First of the types of radiation with which we must be concerned in any installation such as the one under investigation are the gamma rays.

Dr. Corrigan is physicist of the Department of Radiology and director of the Research Division, Harper Hospital, Detroit, Michigan.

Dr. Hayden is associate physicist of the Department of Radiology, Harper Hospital, Detroit, Michigan.

Dr. Reed is a resident in the Department of Radiology, Harper Hospital, Detroit, Michigan.



These, like x-rays, are a form of light beyond visible range whose intensity dies off in space at a rate inversely proportional to the square of the distance. Therefore, the exposure at any distance is a function of the strength of the source, and the range of the individual quanta of radiation is indefinitely great. These radiations are not easily blocked, in fact, they will penetrate several inches of lead and are quite different in nature and behavior from the other two "radiations." In the static eliminator under discussion here, the quantity of radium in any bar, or one pair of bars, is so small that the total gamma ray output would be of no significance whatever except at quite close distances.

The same general statement applies also to the alpha "rays," although for a different reason. These are heavy particles, actually the nuclei of helium atoms, which are ejected from the nuclei of radium and radon atoms and from other members of the radioactive disintegration series as they undergo transmutation. These alpha particles have very large energies but due to their large mass have a very short range in air. The most energetic among them travel only about four inches and most are expended in the first three inches of an air path; hence, they do not constitute a radiation hazard except under very unusual circumstances.

The beta radiation consists of free electrons, also fired from the nuclei of various atoms in the radium disintegration series and with very great energy. Since these particles weigh only about one-seventh thousandth as much as the alpha particle, their range in air is very much greater for the same amount of energy. Some of them have ranges up to about nine feet and will penetrate about three millimeters, or approximately one-eighth inch into human tissue.\* They produce strong ionization effects in living cells and can produce a profound biologic response. For this reason, they have been used for many years for the destruction of superficial cancers, and their effect on both normal and abnormal living tissue is quite well known.

They have relatively little penetrating power, most of them being completely stopped by a thin sheet of aluminum and essentially all eliminated by 1/8 inch of steel. They will, however, reflect from any surface they strike and their reflection

at small angles from heavy metal is practically 100 per cent. For this reason, the possibilities of radiation hazard around an actual installation must include not only the exact beta ray output of the source with which we are dealing, but also the amount of the beta radiation starting away from the operator that may be reflected back toward him by the cast iron sides of a press or other nearby metal reflection surfaces.

### Potential Hazards and Their Control

With this general outline in mind, both the intended use of these radium-containing static eliminators and their potential radiation hazards may be more easily understood. In many industries the accumulation of static is a serious complication in some important process. For example, sheets of paper passing through a press acquire a high charge of frictional static and will not stack properly or feed into a subsequent process. When one or two of these radium-containing bars are mounted in the press in such a manner that the sheets pass close to the surface and are heavily irradiated by the alpha particles from the radioactive elements, their static is discharged and a very important economic advantage is gained. This process is so successful that it is not likely to be replaced in industry, and any difficulties that may arise from its operation must be overcome.

From the point of view of eliminating radiation hazard then, it is necessary to consider the tolerance dose to which people working in the neighborhood of these instruments may be exposed, the quantity of the various radiations that will be present and the mechanical factors necessary to bring the exposure down to safe levels.

The actual radiation output of the type of instrument under discussion has been the subject of a very thorough investigation by Robley D. Evans.<sup>2</sup> These static eliminators brought to our laboratory were very similar though not exactly like those he described. Each of these consisted of an aluminum bar shaped like a shallow trough in the bottom of which was a preparation of radium 9/16 inches wide and 20 inches long. The radium was covered with a thin foil filter of precious metal, said to be gold and nickel, thin enough to permit the escape of alpha and beta particles but impenetrable to the radon gas. These bars were each sealed in a container for a period of two weeks, and the containers were then tested for

\*To avoid a quibble, there are some betas which will penetrate 15 millimeters—about 5/8 inches.

radon. A barely detectable trace was found around one, and a completely negligible quantity was found to be escaping from one small spot on the other.

The bars were then mounted in an apparatus for measuring their beta and gamma ray output. It was found that each bar contained approximately 1 milligram of radium element as claimed and that the distribution of the element along the length of the bar was uniform for all practical purposes. The gamma ray intensity was found to be in accordance with theory and negligible at any distance greater than 8 inches, at which point it was approximately 12.5 milliroentgens per hour, which is the accepted tolerance limit. At the same position the intensity of beta radiation was over 2,300 millireps† per hour.

The beta intensities were measured with a standard type of ionization chamber consisting of a paper cylinder with cellophane ends. The cellophane was made conductive on its inner surface with graphite. The density of this cellophane window with its graphite coating was 3.6 milligrams per square centimeter, which is enough to eliminate some of the weaker beta particles. The chambers, however, are built this way intentionally so that they measure all of the beta radiation which will penetrate the human skin, their measurements becoming directly applicable to problems of human exposure. Additional measurements were made with a Geiger counter having 1.2 milligram window which gave slightly higher results, but these will not be considered in this paper. The beta ray intensity was measured from this point outward to a final distance of 60 inches. It was found that for the source in question measured over the mid-point, the tolerance level of 12.5 millireps per hour was reached at 58 inches with the instrument described.

Referring again to the paper by Evans, we find a complete and thorough evaluation of the beta ray intensities at all angles and all positions which can be significant to the present study. The ionization chamber used in Evans' study had a somewhat heavier window than ours, which would tend to make his results slightly lower, and the radium content per inch of his sources was one-half that

found in ours. However, there were probably also slight differences in the actual density of the top filters of the various instruments and, in consideration of these differences, very excellent agreement was obtained.

The manufacturer of this particular instrument distributes a general information and instruction bulletin to customers, the contents of which are based almost entirely on Evans' studies. Among other things it contains a very reasonable set of rules concerning installation of the instrument and orientation of its active surface with respect to personnel in its immediate vicinity. It is evident therefore that the hazardous situation cited in the beginning of this paper was due to improper installation rather than to any intrinsic fault of the instrument.

The internationally accepted tolerance level for total body exposure to x-rays or gamma rays is one-tenth of a roentgen per day, or 12.5 mr. per hour for not more than eight hours in any one twenty-four-hour period. This value is so well established as to require no further discussion. Its application in this particular case is not likely to come about unless a significant number of radium-containing static eliminators are installed in one location. Any one or two of the instruments described in this paper could not give a significant gamma ray discharge to more than a small part of the body at any one time.

It must be remembered that the penetrating gamma rays have the same strength from the back surface of the instrument as from its working surface. Presumably, an instrument could be installed so that one part of a man's body could be too near the back and such a person would then receive a significant gamma ray dosage over a small area. Unless a long bar happened to be oriented axially with respect to the body, however, it would be impossible for a significant quantity of gamma ray to reach more than a small area on any one's person. If, however, a significant number, perhaps ten, of these instruments were installed in a space such that the average distance from all of the bars to a man working in the central position was of the order of 30 inches, then total gamma ray exposure would be of the order of twice the allowable limit and would have to be considered hazardous. The possibilities of such a situation should be noted in case these instruments become very common and are installed in large numbers, but where there are only one

†The roentgen is a standard unit of measurement of electromagnetic radiations, such as x-rays and gamma rays, within certain limits. It is the quantity of radiation which, under specified conditions, gives an ionization current of one electrostatic unit per c.c. of air. The rep (Roentgen Equivalent Physical) is the quantity of any other radiation such as the beta or alpha which will give the same ionization current.



or two presses with one or two instruments per press, the gamma ray exposure is not likely to attain significant levels.

The possibility of accumulating radon should also be recognized as a potential hazard even though, in the case of the two instruments measured in this study, there was no actual danger. At least some of the instruments reported by Evans had a larger radon output, and the amount of escaping radon could be expected to vary between different instruments and to increase with age or, particularly, with rough handling which might tend to break the seal between the top cover and the radioactive deposit. No significant number of these instruments, therefore, should ever be installed in a place where ventilation is inadequate.

### Beta Ray Exposure

Beta ray exposure, however, is of an entirely different order of magnitude and must be considered in every installation. The tolerance dose for beta radiation is not nearly so well established as that for gamma and, unfortunately, there are references in the literature to tolerance limits which were established under wartime conditions. These are not the tolerance limits which should be adhered to in any sort of normal life, but apply to a time when men were "expendable." They do not take into consideration the necessary safety factors and the possibility that a person may have been exposed to radiation in the past or may have to be exposed to diagnostic or therapeutic radiation dosage in the future. *For all normal life conditions they should be ignored and the tolerance level of 12.5 millireps per hour, or 0.1 rep per day maximum, should be strictly adhered to.*<sup>1,3</sup>

In this laboratory and those of most competent authorities, the dose of 0.1 rep per day is looked upon as a maximum and is never approached any more closely than can be avoided.

In any practical installation of these static eliminators the laboratory measurements of beta intensity can only serve as a rough guide, for the reasons cited earlier. The reflection and scatter of beta particles may actually increase the intensity at any one point to a much higher level than would be expected from either theoretical calculations or measurements made under carefully controlled laboratory conditions where scattering effects are avoided. At the same time the finite range of the beta particle limits the distance which must be used

to attain a safe position. Safe working distance does not vary with the strength of the source to as great an extent as it does in the case of the gamma radiation. For the sources and scattering conditions found in this particular study, a distance of 60 inches was found to be necessary. This same distance might equally well apply to a stronger source. A distance of 9 or 10 feet might apply to almost any practical source of radium beta particles regardless of their initial intensity. There is no simple relationship between the source strength and the safe distance as there is in the case of gamma rays.

In every case those responsible for the health and safety considerations of such installations should be cognizant of this possible hazard, and unless the installation is obviously safe, protection measurements should be made and modifications based on these measurements should be installed.

### Summary

1. Static eliminators containing radium are highly successful in certain industrial processes. Their use is already quite general and can be expected to increase.

2. The radiation which may reach personnel from these static eliminators constitutes a very real industrial hazard which must be considered in every installation.

3. The major hazard is the beta radiation, which can easily attain dangerous levels at close distances. The alpha radiation can be of no significance unless the bars are handled improperly, and the gamma radiation cannot constitute a hazard unless several instruments are installed in close proximity.

4. The escape of the radon is negligible and with reasonable ventilation is not likely to show any real increase over the radon naturally present in air.

5. The rules for safe installation set forth in the manufacturer's own bulletin should never be violated, and, particularly, the safe working distances set forth for each type of installation must be scrupulously observed.

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## The Horizons of Modern Medicine

Surprisingly little of today's medical practice is based on the standards of fifty, or even twenty-five years ago. Yet a substantial proportion of today's doctors received their original training during the first quarter of this century. The constant flux of medical thought inherent in recent scientific progress has demanded of every average practitioner constant study and research merely to keep abreast of current medical and surgical methods. During this same period, demands on the leisure time of this average practitioner, despite today's rapid communications, have tended to increase.

The arresting feature of this panorama of medical change is that the vast majority of doctors have successfully faced the challenge of medical progress, and have adequately re-educated themselves to the practice of today's medicine. Through the medium of post-graduate clinics and schooling, co-operation and consultation with more recently trained colleagues, and constant recourse to current medical literature, today's doctor has escaped being dated by the limitations of his original training. The horizons of modern medicine continue to be limitless, but with continuing alertness and inquiry the older man is as apt to possess the latest in medical information as the younger.

Some of this chameleon-like quality in the American doctor has been due to the expansion and accessibility of postgraduate educational facilities and authoritative current literature. Not a little has been due to the development of improved medical ethics during the past half century which has increased the contacts and free flow of information among the profession. The field of medicine, combining opportunity for service to one's fellow man with the requirement of intense preliminary training, has attracted a high type of individual. Opportunity for great public service has apparently more than compensated for the lack of great remuneration. Because of such factors, the general level of practice is higher today than ever before.

The average American doctor, without political interference, has met the challenge of modern progress by improving the quality of his individual service. It would seem that government might better serve by devoting itself to the increasingly expensive task of educating a greater quantity of professionally free doctors.

*W.E. Barstow M.D.*

President, Michigan State Medical Society

*President's*



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# Editorial

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## SOCIAL SECURITY LEGISLATION

CONGRESS is still considering the extension of social security. The original bills, H.R. 2892 and H.R. 2893, contained a provision extending social security "benefits" to professional men—doctors, lawyers, and others—as well as many other groups. In hearings before the House Ways and Means Committee the doctors, dentists, and lawyers were eliminated from the group. A new bill has been introduced, H.R. 6000, consolidating the other two.

This entire legislation is an attempt to give old age and security benefits to persons who have been engaged in occupations covered by the bill when they have been incapacitated or have reached the age of sixty-five. The present law provides that if a person earns over \$14.99 a month he forfeits his rights to benefits for that month. Under the new bill, this would be raised to \$50.00 a month and after age seventy-five, no limit. Congress might change its mind and put farmers, physicians, dentists, lawyers, back into the bill as they now are including other professional men such as writers, editors, artists, architects, actuaries, and the owners of independent business, such as small stores. If the original group should be replaced, the medical profession will decidedly be interested again in this legislation.

We believe something very definite should be done to change the fundamental concept of this program. As it now stands, the social security bill is a hidden income tax on gross incomes. The money is placed in the general fund and is used to pay general expenses of government. Payments to beneficiaries out of this money come from taxes. It is said that there are credits of nine or ten billion dollars in this fund but that money is represented by I.O.U.'s from the Government. We would suggest a provision be added to this bill under which this fund be actually considered and used as insurance; that the money be used for certain approved loans as any great insurance company now invests its funds. This social security agency would then become a truly fiduciary organization.

We would further suggest that the limitations

upon earning capacities of an individual who has paid into the fund in order to accumulate old age benefits be removed. Let him draw that benefit when he becomes of retirement age, that is sixty-five years. No independent insurance company would be allowed to write a retirement benefit policy accepting payments until the insured becomes sixty-five and then refuse payment just because he is earning \$15.00 or \$50.00 a month.

We propose two things for the social security O.A.S.I.:

1. Prohibit the government from spending this money which is fundamentally not a tax but an insurance investment.
2. Make it a real insurance investment by providing that the beneficiaries may receive the benefits.

## LET'S BE ALERT

FAVORABLE ACTION of the United States Senate in disapproving the President's Reorganization Plan No. 1 has been very consoling news. Many believe the fight has been won because of the two-to-one vote against this measure. The past president of one of our county medical societies remarked just the other day that we could now feel secure, the Congress is on our side and certainly will not vote socialized medicine. But within twenty-four hours the President, in a news conference, announced that he was determined to put across what he falsely calls the Hoover Plan for Reorganization, and he will again submit a proposal to make a Welfare Department. According to the law, he may do this, and if he does it will be effective, unless it is again disapproved by one House of Congress.

We must caution our members that the social-minded, determined bureaucrats who have control of the administrative part of government will not give up with the one licking they got by the Senate. They have determined to bring about the welfare state and especially the program which we recognize as political medicine. If it is turned down in one way, it will spring up in another. These attacks can be hatched overnight, but it takes us,

the unsuspecting medical profession, considerable time to become aware of them, to recognize their trend, or to combat them. Sixty days is a short time to take effective action, so **BE ON THE ALERT.**

### TIME PASSES, FACES CHANGE

**T**HE MONTH of August has made a profound impression upon the medical personnel of Michigan. Four outstanding personalities were removed from our midst.

Our beloved councilor, T. E. DeGurse, M.D., last year had been honored by selection as the outstanding General Practitioner of our state. He was a delightful character, loved by all who knew him, and he was known far and wide in his section of the state.

Tom Gruber, M.D., performed the stupendous task of establishing the Wayne County General Hospital as one of the most outstanding hospitals of the nation to care for the unfortunate and poor of a great city. He was keenly interested in the advancement of the medical profession. He served in many capacities in his county, in his state, and as a delegate, for many years, to the American Medical Association. His was one of the keenest minds in the House of Delegates, and his suggestions were respected.

Bruce Douglass, M.D., by his keen knowledge of public health and his great administrative ability, conducted the development of the Detroit Health Department into a true and very efficient civic service. His opinions and advice were sought by industrial and civic agencies, and his leadership in the fight against poliomyelitis, tuberculosis and other scourges has been well accepted and has been appreciated by his community.

Stan Insley, M.D., was one of the pioneers in providing prepayment insurance for those to whom a serious illness might also be a serious financial catastrophe. Dr. Insley early began the study of co-operative methods and became actively interested with the group of pioneers who developed the Blue Cross and Blue Shield in Michigan. With a singleness of purpose, he suggested the application of our voluntary medical service plans to the care of the veterans which is now known as the Michigan Plan. Many contacts had been made unsuccessfully until Dr. Insley was instrumental in getting the ear of representatives of the Veterans Administration.

These four giants demonstrate the continuous effort by public-spirited medical men to bring benefits to their fellow citizens. These men, by their lives, have demonstrated that the true physician is a man of two personalities. First, he is a physician, second, he takes over the problems of his fellow citizens and demonstrates that he is also one of them.

### NEW OFFICERS

**A**T THE 84th Annual Session of the Michigan State Medical Society held in Grand Rapids, September 21, 22, 23, and 24, 1949, Clarence E. Umphrey, M.D., of Detroit was unanimously selected as President-elect.

John S. DeTar, M.D., of Milan was elected Councilor of the 14th district; William Bromme, M.D., of Detroit was re-elected Councilor of the 18th district; H. B. Zemmer, M.D., of Lapeer was appointed to serve the unexpired term of T. E. DeGurse, M.D., deceased, of the 7th district; LeRoy W. Hull, M.D., of Detroit was elected Councilor of the first district to fill out the unexpired term of C. E. Umphrey, M.D.

R. H. Baker, M.D., of Pontiac was elected Speaker of the House; J. E. Livesey, M.D., of Flint was elected Vice Speaker. L. G. Christian, M.D., of Lansing and William A. Hyland, M.D., of Grand Rapids were elected Delegates to the American Medical Association; R. L. Novy, M.D., of Detroit was elected to fill the unexpired term of T. K. Gruber, M.D., deceased, as Delegate to the American Medical Association. H. H. Cummings, M.D., of Ann Arbor, and E. C. Texter, M.D., of Detroit were elected alternate delegates to the American Medical Association. R. A. Johnson, M.D., of Detroit was elected to fill the unexpired term of R. L. Novy as alternate delegate.

The House of Delegates elected Wilfrid Haughey, M.D., of Battle Creek as President-for-a-Day (September 21, 1949) in order to give him the honor of the presidency, but to retain him in his present capacity as Editor.

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Androgen-dependent cancer of the prostate may be partially controlled by estrogens; conversely, androgens are factors for growth.

\* \* \*

Circumcision in childhood militates against cancer of the penis in advanced age.

\* \* \*

If the scrotal swelling transilluminates, is there a solid tumor masked beneath?



# Michigan Foundation for Medical and Health Education

## *Symbol of Medical Progress*

"Progress, man's distinctive mark alone"—and the words of Robert Browning continue true as each year finds the Michigan Foundation for Medical and Health Education moving toward its goal of providing more citizens of Michigan with highest quality modern medical and health education.

Four years have passed since its founding and with those years has come the inauguration of many projects for which the Foundation was brought into being. Today, through the generosity of the medical profession and laity alike, the Foundation has funds approximating \$125,000 with which to carry out the objectives set forth in its articles of incorporation.

The purposes of the Michigan Foundation for Medical and Health Education are contained in the following quotation from the Articles of Incorporation:

"To acquire, provide, use, develop, endow, and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowships and scholarships; all in such manner as the Trustees shall determine. This corporation is organized and shall be operated exclusively for benevolent, scientific and educational purposes and its property shall be used by it solely for the purposes for which it is incorporated."

Foremost among accomplishments of the Foundation is the establishment of a revolving loan fund designed to encourage medical practice in the rural areas of the state. Known as the "Fund for the Encouragement of Medical Practice in Rural Areas" it offers financial aid to upper class medical students, interns and residents in order that they can complete their studies or work.

The administration of this special fund is under the direction of a Qualifications Committee of the Trustees of the Foundation proper. Three re-

quirements have to be met by all applicants seeking help: (a) the individual who obtains aid will be expected to practice in a rural area for a minimum period; (b) the loan shall be without interest until the end of the individual's first year of practice and (c) the loan is to be repaid in line with conditions established by the Board of Trustees of the Foundation.

The health needs of rural areas also come into focus with the Foundation's financial sponsorship of the Third Annual Michigan Rural Health Conference. This year's meeting is scheduled for October 28-29 in Grand Rapids with several nationally recognized Health authorities appearing on the program and ample opportunity given for group participation and discussion. E. I. Carr, M.D., President of the Foundation, is serving the Conference as Chairman.



E. I. CARR, M.D.  
President of the Foundation

### **Foundation Co-operates in Michigan Health Survey**

The completion of the Michigan Health Survey indicates another facet of the work of the Foundation. Social changes make necessary a continuing supply of information on specific medical and health needs by number, kind and location. To this end the Foundation supplied a portion of the funds with which this survey, aimed to obtain the true needs of various rural communities for medical care, was carried on. The results of the survey will soon be made available.

Another Foundation activity is that of aiding medical research. Lack of funds with which to determine causes and devise controls of new diseases has been one of the great stumbling blocks confronting the medical profession in its quest for better health for everyone. Now, with funds available for this purpose it is possible to supply money

at the time it is needed and at the place it is needed.

Until a few years ago, the receiving of gifts and grants to be used for medical and health education proved to be a problem for the medical profession. Prior to the organization of the Michigan Foundation, no agency existed wherein donations could be properly allocated to worthwhile projects. With the birth of the Foundation the problem was alleviated and the way was cleared for acceptance of grants from individuals to be used in specific fields of medical research and endeavor.

Dr. Carr, President of the Foundation since its founding in the autumn of 1945, interpreted the need for a continuing flow of funds into the treasury in the Foundation's brochure titled "Leading in Learning" where he states:

"Clinical research can no longer be supported on a shoestring if it is to contribute to the advancement of medicine. The day when useful information could be obtained by the grant of a bottle of pills and a few hundred dollars is past. The advances made in the methods of clinical research and the complexity of medical problems have increased research costs tremendously. Universities and colleges can no longer contribute the major portion of the funds for clinical research.

"These funds have to come from private sources such as foundations, private donors, industry or public funds. In the four years the Michigan Foundation has been operating we have done exceedingly well, both from a standpoint of activity and contributions. It is our bounden duty to see that this progress is continued. Donations and gifts from the citizens of Michigan have created the Foundation—future gifts must maintain it."

#### List of Contributions and Pledges To September 15, 1949

Allegan County Medical Society; R. W. Alles, M.D., Detroit; Anonymous; Anonymous (Memory of Mother); Anonymous (Woman's Auxiliary member); G. E. Anthony, M.D., Flint; R. F. Asselin, M.D., Detroit.

R. H. Baribeau, M.D., Battle Creek; P. S. Barker, M.D., Ann Arbor; Barry County Medical Society; W. E. Barstow, M.D., St. Louis; J. H. Beaton, M.D., Grand Rapids; M. G. Becker, M.D., Edmore; A. P. Biddle, M.D., and Grace W. Biddle, Detroit\*; A. W. Blain, M.D., Detroit; Branch County Medical Society; Lionel Braun, M.D., Detroit; C. D. Brooks, M.D., Detroit; J. D. Bruce, M.D., Ann Arbor\*; A. S. Brunk, M.D., Detroit; D. H. Burley, M.D., Almont; Mary Lou Byrd, M.D., Grand Rapids.

A. D. Calomeni, M.D., Lansing; A. C. Carlson, M.D., Cottonwood, Arizona; E. I. Carr, M.D., Lansing; H. R. Carstens, M.D., Philadelphia, Pa.; Donald Chandler, M.D., Grand Rapids; L. G. Christian, M.D., Lansing; R. E. Clark, M.D., Detroit; D. E. Cohn, M.D., Detroit; B. R. Corbus, M.D., Grand Rapids; Clinton County Medical Society; C. V. Costello, M.D., Holland\*; H. D. Crane, M.D., Grand Rapids; H. H. Cummings, M.D., Ann Arbor; A. C. Curtis, M.D., Ann Arbor.

(Continued on Page 1288)

#### Clarification of Income Tax Deductions

At the request of contributors to the Michigan Foundation for Medical and Health Education a clarification was asked of the United States Treasury Department relative to income tax deductions. The accompanying letter indicates the official and favorable decision of the Treasury Department and will be of interest and satisfaction to future contributors to the Foundation.

#### TREASURY DEPARTMENT

Office of  
Commissioner of Internal Revenue  
Washington 25

Michigan Foundation for Medical  
and Health Education  
2020 Olds Tower Building  
Lansing 8, Michigan

Gentlemen:

It is the opinion of this office, based upon the evidence presented, that you are exempt from Federal income tax under the provisions of section 101(6) of the Internal Revenue Code and corresponding provisions of prior revenue acts, as it is shown that you are organized and operated exclusively for educational purposes.

Accordingly, you will not be required to file income tax returns unless you change the character of your organization, the purposes for which you were organized, or your method of operation. Any such changes should be reported immediately to the collector of internal revenue for your district in order that their effect upon your exempt status may be determined.

Furthermore, under substantially identical authority contained in sections 1426 and 1607 of the Code and/or corresponding provisions of the Social Security Act, the employment taxes imposed by such statutes are not applicable to remuneration for services performed in your employ so long as you meet the conditions prescribed above for retention of an exempt status for income tax purposes.

You will be required, however, to file annually, beginning with your current accounting period, an information return on Form 990 with the collector of internal revenue for your district so long as this exemption remains in effect. This form may be obtained from the collector and is required to be filed on or before the 15th day of the fifth month following the close of your annual accounting period.

Contributions made to you are deductible by the donors in arriving at their taxable net income in the manner and to the extent provided by section 23 (o) and (q) of the Internal Revenue Code, as amended, and corresponding provisions of prior revenue acts.

Bequests, legacies, devises or transfers, to or for your use are deductible in arriving at the value of the net estate of a decedent for estate tax purposes in the manner and to the extent provided by sections 812(d) and 861(a)(3) of the Code and/or corresponding provisions of prior revenue acts. Gifts of property to you are deductible in computing net gifts for gift tax purposes in the manner and to the extent provided in section 1004(a)(2)(b) and 1004(b)(2) and (3) of the Code and/or corresponding provisions of prior revenue acts.

The collector of internal revenue for your district is being advised of this action.

By direction of the Commissioner.

Respectfully,  
S/ E. I. McLARNEY  
Deputy Commissioner

December 2, 1948.



# MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

J. S. DeTar, M.D., Milan; Dickinson-Iron County Medical Society.

Eaton County Medical Society; C. W. Ellis, M.D., and B. W. Ellis, M.D., Lansing.

W. G. Fenner, M.D., Detroit; O. O. Fisher, M.D., Detroit; A. C. Furstenberg, M.D., Ann Arbor.

L. J. Gariepy, M.D., Detroit; Genesee County Medical Society; J. L. Gillard, M.D., Muskegon; R. W. Gillman, M.D., Detroit; Gratiot-Isabella-Clare County Medical Society; Grand Traverse-Leelanau-Benzie County Medical Society.

T. J. Heldt, M.D., Detroit; R. F. Herschelmann, M.D., Detroit; Lee Hileman, M.D., Ecorse; H. C. Hill, M.D., Howell; Hillsdale County Medical Society; L. J. Hirschman, M.D., Detroit; L. E. Holly, M.D., Muskegon; A. P. Holstein, M.D., Manchester; Houghton-Baraga-Keweenaw County Medical Society; R. J. Hubbell, M.D., Kalamazoo; Huron County Medical Society; F. P. Husted, M.D., Bay City; W. A. Hyland, M.D., Grand Rapids.

IDWTGTRMB Club; Ingham County Medical Society; S. W. Insley, M.D., Detroit\*.

Jackson County Medical Society; Joint Committee on Health Education; Francis Jones, M.D., Lansing.\*

R. E. Kalmbach, M.D., Lansing; C. G. Kirchgeorg, M.D., Frankenmuth; Theodore Kilvoord, M.D., Battle Creek.

Ruth E. Lalime, M.D., Bear Lake; F. H. Lashmet, M.D., Petoskey; W. W. Lathrop, M.D., Jackson; V. S. Laurin, M.D., Muskegon; Lenawee County Medical Society; J. R. Lentini, M.D., Grand Rapids; Simon Levin, M.D., Houghton; S. R. Light, M.D., Kalamazoo.

Macomb County Medical Society; Manistee County Medical Society; Marquette-Alger County Medical Society; R. G. B. Marsh, M.D., Tecumseh; W. P. Marshall, M.D., Kalamazoo; E. F. McMillan, M.D., Charlevoix; Mason County Medical Society; G. L. McKillop, M.D., Gaylord; Mecosta-Osceola-Lake County Medical Society; H. A. Meinke, M.D., Hazel Park; Menominee County Medical Society; Michigan Medical Service; Mrs. K. B. Miner, Flint; Gertrude F. Mitchell, M.D., Detroit; Monroe County Medical Society; J. C. Montgomery,

M.D., Detroit; H. R. Moore, M.D., Newaygo; H. L. Morris, M.D., Detroit; Muskegon County Medical Society; R. L. Mustard, M.D., Battle Creek.

Cora Boyce Neal, Grand Rapids.

Ontonagon County Medical Society.

Wm. H. Parks, M.D., Petoskey; A. W. Petersohn, M.D., Battle Creek; R. C. Pochert, M.D., Owosso.

L. B. Rasmussen, M.D., Vicksburg; G. L. Renaud, M.D., Detroit; Lawrence Reynolds, M.D., Detroit; Meshel Rice, M.D., Detroit; J. M. Robb, M.D., Detroit; J. M. Robb, M.D., Detroit (memorial to the late J. D. Bruce, M.D.); Howard Robinson, M.D., Detroit; John Rodger, M.D., Bellaire; H. R. Rothman, M.D., Detroit; W. Z. Rundles, M.D., Flint.

G. B. Saltonstall, M.D., Charlevoix; Sanilac County Medical Society; C. A. Scheurer, M.D., Pigeon; Edna Schrich, M.D., Holland; R. J. Seime, M.D., Ypsilanti; G. W. Sippola, M.D., Detroit; E. F. Sladek, M.D., Traverse City; F. N. Smith, M.D., Grand Rapids; R. Earle Smith, M.D., Grand Rapids; St. Clair County Medical Society; Shiawassee County Medical Society; Ethelbert Spurrier, M.D., Detroit; W. J. Stapleton, Jr., M.D., Detroit; H. B. Steinbach, M.D., Detroit; Gabriel Steiner, M.D., Detroit; R. H. Stevens, M.D., Detroit;\* R. A. Stiefel, M.D., Battle Creek; Elizabeth A. Stone, M.D., Romeo; C. L. Straith, M.D., Detroit; R. H. Strange, M.D., Mt. Pleasant.

R. E. Toms, M.D., Brooklyn, N. Y..

C. E. Umphrey, M.D., Detroit.

Jerrian VanDellen, M.D., East Jordan; E. E. Vivirski, M.D., Jackson.

Ralph Wadley, M.D., Lansing; R. W. Waggoner, M.D., Ann Arbor; R. V. Walker, M.D., Detroit; Wash- tenaw County Medical Society; H. B. Weaver, M.D., Greenville; H. L. Weitz, M.D., Traverse City; K. N. Wells, M.D., Spring Lake; C. G. Wencke, M.D., Battle Creek; E. L. Whitney, M.D., Detroit; Lt. Comm. Frances L. Willoughby, M.C., Traverse City; S. B. Winslow, M.D., Battle Creek; E. R. Witwer, M.D., Detroit;\* Woman's Auxiliary to the Michigan State Medical Society; J. S. Wyman, M.D., Flint.

D. A. Young, M.D., Detroit.

Margaret H. Zalen, M.D., Kalamazoo; C. R. Zolliker, M.D., Imlay City.

\*Deceased

Name .....  
Office Add..... City.....  
Res. Add. .... City.....

I hereby pledge to the

## MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning December 1, 1949, the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
\$	\$	\$

My contribution is

Please

Check

Your

Choice



(1) In Cash

or (2) In War or  
Victory Bonds

or (3) In Life Insurance

or (4) As a Memorial

or (5) In my Will

☐ to be paid in the total sum ☐  
or in annual payments of \$.....

☐ to be paid in the total sum ☐  
or in annual payments of \$.....

☐ to the memory of:

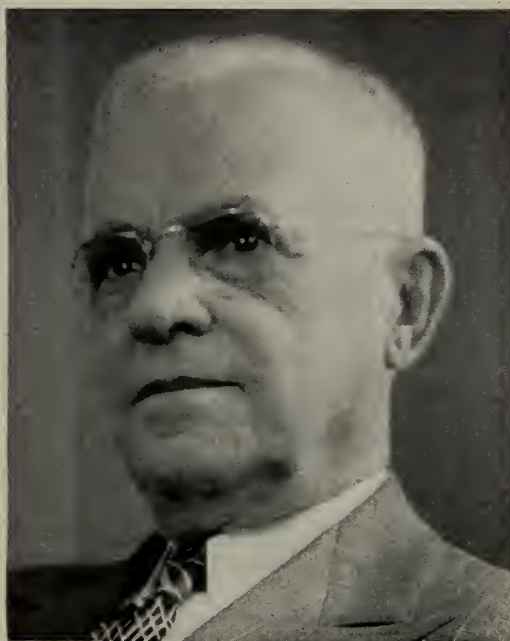
SIGNATURE .....

# Who's Who in MSMS

IN THE late 1920's when the Michigan State Medical Society became interested in obtaining the services of a publisher for both THE JOURNAL of the Michigan State Medical Society and the Medical History of Michigan, then being prepared by the late Dr. C. B. Burr and his committee, the name of J. R. Bruce of Saint Paul, Minnesota, was brought to the attention of the committee in charge, as one who had established a reputation for special service in this field.

Investigation proved that the recommendation was a good one, and so it was that in 1930, J. R. Bruce, president of the Bruce Publishing Company of Saint Paul, took over the production of THE JOURNAL as well as the Medical History. The History was published in two volumes in 1930. Mr. Bruce has served as publisher of THE JOURNAL continuously since that time, and the relationship has proved to be most satisfactory under the editorship of three different editors—Dr. J. H. Dempster, Dr. Roy H. Holmes and Dr. Wilfrid Haughey. The first numbers were published under the business management of Dr. Frederick C. Warnshuis, then Secretary of the Society; the later numbers under his successor, William J. Burns.

Mr. Bruce established the Bruce Publishing Company of Saint Paul in 1912, having become interested in the publication field through his early experience in newspaper work, both in the editorial and advertising departments, and as advertising representative of a group of business and class magazines. It was while he was serving in the latter capacity that he decided to go into business for himself, his first publication being in the field of pharmacy. From there it was but a step to publications in the medical field, the first such journal coming under his management being *Minnesota Medicine*, which was established as the official journal of the Minnesota State Medical Association in 1918. This publication is still handled for the Association under the business management of Mr. Bruce. Other journals and books of transactions were soon added, among them being—Transactions of the Western Surgical Association, Transactions of the American Association of Genito Urinary Surgeons, Transactions of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, *The X-Ray Tech-*



J. R. BRUCE

*nician* (for the American Society of X-Ray Technicians), *The Journal of Aviation Medicine* (for the Aero Medical Association), *North-West Dentistry* (for the Minnesota State Dental Association), *The Bulletin of the Hennepin County Medical Society*, *Annals of Allergy* (for the American College of Allergists), and a large number of books on medical subjects.

The Bruce Publishing Company is housed in its own modern building, with one-floor operation, making for efficiency in production. The newest equipment has been added from time to time to streamline production. Through the years the staff of the Bruce Publishing Company has acquired a technical knowledge of the style and methods of handling business and professional publications which is unique.

It has ever been the aim of Mr. Bruce to give his customers, in addition to printing service, a specialized service in both the editorial and advertising aspects of publishing. This editorial service coupled with the printing facilities to produce THE JOURNAL has proved to be a very satisfactory combination.

The association which the Michigan State Medical Society has been privileged to have with Mr. Bruce the past twenty years has been most pleasant. The personal interest he has shown in problems of



the Editor, the Business Manager and the Publication Committee is one not often met. It is greatly appreciated by all those who have come in contact with him, and it is hoped that his services to the Michigan State Medical Society and those of his organization may continue for many years to come.



H. B. ZEMMER, M.D.

**H**ARRY BURTON ZEMMER, M.D., Lapeer, has been appointed to fill the unexpired Councilor term in the Seventh District left by the untimely death of T. E. DeGurse, M.D., Marine City. The appointment was announced by E. F. Sladek, President of the Michigan State Medical Society, prior to the 84th Annual Session.

Dr. Zemmer was born in Columbiaville, Michigan, in 1895. He attended Albion College and received his medical degree from the Detroit College of Medicine and Surgery. His internship was gained at Delray Industrial Hospital, Detroit.

The new Councilor has taken postgraduate work at Harvard, Johns Hopkins and the University of Chicago, as well as in Germany and Switzerland.

Memberships in medical organizations include those of the MSMS, Lapeer County Medical Society, the American Medical Association and a Fellowship in the American College of Surgeons.

Dr. Zemmer has served as Chief Surgeon of Lapeer City Hospital since 1924 and has been a staff member at Hurley, Woman's and St. Joseph's

Hospital in Flint for the same period. In addition, he has been Consulting Surgeon at the Lapeer State Home and Training School since 1930.

He is a Director and former President of the Lapeer Savings Bank, a member of Rotary Club and the Lapeer Chamber of Commerce.

Dr. Zemmer is a former chairman of the Michigan State Mental Health Commission and a member of the MSMS Rural Health Committee. As Chairman of that Committee he was a prime mover behind the first two Michigan Rural Health Conferences and this year is acting as advisor to the same body.

#### U OF M MEDICAL SCHOOL RECEIVES \$3,000,000 GRANT

Expectation of early completion of a greatly enlarged medical center at the University of Michigan was voiced October 12 by University President Alexander G. Ruthven as he made formal announcement of the receipt of a \$3,000,000 grant from The Kresge Foundation of Detroit. The Kresge grant is to be used for the construction of a Medical Research Institute, one of five new units needed to complete the enlarged medical center.

Labelling the Kresge Foundation grant "the most important single event in the 100-year history of the Medical School and one of the most significant in the University's existence," President Ruthven said it would give the University's Board of Regents and the people of Michigan faith in the belief that "the entire enlarged center can be built in a few years."

His enthusiasm was supported by Albert C. Furstenberg, M.D., Dean of the Medical School, who declared "great progress can now be anticipated, for the research institute building will give our men and women the facilities and the incentive for doing the work for which they are eminently qualified."

The other units planned for the expanded center are: an out-patient clinic, plans for which are now being drawn, a maternity hospital which is due to be completed in a few months, a medical and nursing education building and a children's and infants' hospital.

An earlier stimulus for the medical center came with the appropriation of \$100,000 by the 1949 Michigan Legislature for drawing of plans for the outpatient clinic. This was one of the many legislative projects fostered by the MSMS Legislative Committee during the past session.



P. L. LEDWIDGE, M.D.  
Detroit, General Chair-  
man of Arrangements.

## 3rd Michigan Postgraduate Clinical Institute

March 8, 9, 10, 1950

**S**PEAKERS and subjects at the 1950 Michigan Postgraduate Clinical Institute scheduled for the Book-Cadillac Hotel, Detroit, Wednesday, Thursday, Friday, March 8-9-10, 1950, are of such renown and of such practical interest respectively, that the Arrangements Committee, headed by P. L. Ledwidge, M.D., Detroit, anticipates a record-breaking crowd of Michigan, Ohio, Indiana, Wisconsin, and Ontario physicians and surgeons to register at the Institute.

Here's an early "peek" at the well-rounded three-day continuation course which busy practitioners of medicine will enjoy next March in Detroit:

*Franz G. Alexander, M.D., Chicago, Ill.*—Psychiatric subject to be chosen.

*Marion A. Blankenhorn, M.D., Cincinnati, Ohio*—"The Specificity of the Vitamins and Their Proper Clinical Use."

*F. Bayard Carter, M.D., Durham, N. C.*—"Indications for Caesarean Section."

*George Crile, Jr., M.D., Cleveland, Ohio*—"Present Status of the Treatment of Hyperthyroidism."

*Richard H. Freyberg, M.D., N. Y. C.*—"Arthritis—What to Know About It and What to Do About It."

*J. Mason Hundley, Jr., Baltimore, Md.*—"Discussion of Radiation Therapy for Benign Uterine Pathology."

*Julian P. Price, M.D., Florence, S. C.*—"The Use and Abuse of Drugs in Treating Children."

*Leo G. Rigler, M.D., Minneapolis, Minn.*—"X-Ray Diagnosis of Diseases of the Chest."

*Francis E. Senear, M.D., Chicago, Ill.*—"Recent Advances in Dermatology."

*Isadore Snapper, M.D., N. Y. C.*—"Treatment of Acute Aneuria."

*Internationally Renowned Ophthalmologist*—"Eye Findings in Systemic Disease."

*Waltman Walters, M.D., Rochester, Minn.*—"Surgical subject to be chosen."

*Darrell A. Campbell, M.D., Eloise*—Clinical Pathological Conference.

*William S. Carpenter, M.D., Detroit*—"Choice of Surgery in Peptic Ulcer—Comparative Results."

*Frederick A. Collar, M.D., Ann Arbor*—Surgical subject to be chosen. Dr. Collar also will be moderator of Quiz Period on March 10, 1950.

*Jerome W. Conn, M.D., Ann Arbor*—Medical subject to be chosen.

*Joe DePree, M.D., Grand Rapids*—"The Art of Anesthesia."

*S. E. Gould, M.D., Eloise*—Moderator of Clinical Pathological Conference on March 9, 1950.

*Herbert W. Harris, M.D., Lansing*—"Everyday Orthopedics."

*A. Morgan Hill, M.D., Grand Rapids*—"Preventive Pediatrics."

*Homer A. Howes, M.D., Detroit*—"How to Investigate the Allergic Patient."

*Rockwell M. Kempton, M.D., Saginaw*—"The Management of Diarrhea in Infants and Children."

*Robert B. Kennedy, M.D., Detroit*—"The Use of Endocrine Products in Obstetrical and Gynecological Office Practice."

*John D. Littig, M.D., Kalamazoo*—"Fundamentals in Diabetic Management."

*James H. Maxwell, M.D., Ann Arbor*—Otolaryngological subject to be chosen.

*Roy D. McClure, M.D., Detroit*—"Surgery of the Breast."

*J. Duane Miller, M.D., Grand Rapids*—"Industrial Surgery is for the Industrious Surgeon."

*Kenneth B. Moore, M.D., Flint*—Discussion Conference on Cancer on March 8, 1950.

*Plinn F. Morse, M.D., Detroit*—"Laboratory Methods for the Diagnosis of Malignancy."

*Gordon B. Myers, M.D., Detroit*—"The Treatment of Nephritis."

*Reed M. Nesbit, M.D., Ann Arbor*—"An Appraisal of Methods for Treatment of Urinary Infections."

*C. I. Owen, M.D., Detroit*—Moderator of Discussion Conference on Cancer on March 8, 1950.

*A. Hazen Price, M.D., Detroit*—Discussion Conference on Cancer on March 8, 1950.

*Henry L. Smith, M.D., Detroit*—"Important Concepts in Cardiology for the General Practitioner."

*Palmer E. Sutton, M.D., Royal Oak*—"A Practitioner Evaluates Some of the Recent Advances in Obstetrics and Gynecology."

*E. Thurston Thieme, M.D., Ann Arbor*—Surgery of the Biliary Tract."

*Franklin H. Top, M.D., Detroit*—"The Poliomyelitis Epidemic of 1949."

*Milton R. Weed, M.D., Dearborn*—Clinical Pathological Conference on March 9, 1950.



# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

A new pamphlet, "Communicable Disease Control in the School Health Program" has been prepared by this Department to replace the older folder for school personnel, "Communicable Diseases and the School." Material to aid in the school health program and an up-to-date communicable disease chart are included. These pamphlets are available to local schools from the local health departments or from the Michigan Department of Health.

\* \* \*

Studies have shown that the medical profession is a large contributor in the recruitment of students for professional nurses' training.

For that reason attention is called to the fact that the Michigan Nursing Center Association has compiled a leaflet, "If the Cap Fits," which is free to those interested in becoming either professional or practical nurses. It also has a detailed directory of schools of professional nursing. Either may be had free by writing the Michigan Nursing Center Association, 750 East Main Street, Lansing 12, Michigan.

\* \* \*

A further step in the reorganization of the Department was made with the appointment of John McKevitt, A.B., M.P.A., as Director of a new Division of Administrative Services.

The Division includes as sections, the former Bureau of Education, Bureau of Finance, Office of Personnel, Office of Law Enforcement, and the Communications Group.

\* \* \*

This Department again calls attention of physicians to the availability of free penicillin for the treatment of gonorrhea. Distribution to private physicians is made through the local health departments or, where there is no local department, from the Michigan Department of Health, Lansing 4.

\* \* \*

The thirteenth Venereal Disease Postgraduate Course will be offered at the United States Public Health Service Medical Center, Hot Springs, Arkansas, October 31 through November 5, 1949.

Requests to attend this course should be mailed directly to Senior Surgeon E. B. Johnwick, Medical Officer in Charge, USPHS Medical Center, Hot Springs.

The Michigan Department of Health has no funds available for tuition or other expenses. Details of the course may be had from the Division of Tuberculosis and Venereal Disease Control, Michigan Department of Health.

\* \* \*

To aid in recruiting blood donors for the Michigan free plasma program, a second (new) radio transcription has been prepared by the Department and is available for use upon request.

"Blood Fractionation" is the subject of a discussion by Dr. G. D. Cummings, Director of the Division of Laboratories of the Department.

\* \* \*

Blue Cross and certain commercial insurance companies are now co-operating in the venereal disease control program by honoring the charge for treatment of syphilis at the Michigan Rapid Treatment Center.

\* \* \*

The third of a series of articles on "Inactivation of Partially Purified Poliomyelitis Virus in Water by Chlorination" written by Serge Lensen, Ph.D., Max Stebbins, M.S., of the Michigan Department of Health Laboratories and three others appeared in the September issue of the *American Journal of Public Health*.

\* \* \*

A new catalog listing 180 films and film strips on fifty health subjects for lay and professional groups will soon be available from this Department.

The films may be borrowed without charge for showing to school, community or professional groups or clubs. Requests for the catalog of the Michigan Department of Health Film Loan Library and for use of films should be made to the local health department or to the Michigan Department of Health.

\* \* \*

The 29th annual Michigan Public Health Conference will be held in Hotel Statler, Detroit, November 9, 10 and 11. Practicing physicians are invited to participate.

\* \* \*

Dr. J. K. Altland, Director of the Division of Local Health Administration of the Michigan Department of Health, has been named to the Founders' group of the newly formed American Board of Preventive Medicine and Public Health.

The Board recently founded by the American Medical Association provides recognition for those in public health fields similar to that accorded by boards in the other medical specialties.

\* \* \*

In order that the city or county health department may know when a child is born to a family of its jurisdiction, in another locality of the state, full-time county and city health departments are now being sent carbon copies of all notifications of birth registration from this department. The originals are sent to the parents of the child.

\* \* \*

Visitors from Guatemala, Ireland and Canada arrived in the Department during August.

Miss Ofelia Paz y Paz G. of Guatemala arrived August 15 to spend a year studying sanitary bacteriology, media

(Continued on Page 1294)





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(Continued from Page 1292)

production and clinical pathology, under the sponsorship of the Institute of Inter-American Affairs.

Miss Jean Oddie, nutritionist from the Canadian Ministry of Health, Saskatchewan, Canada, spent two days studying with Department nutritionists.

Dr. F. S. Stuart of the University of Dublin, Ireland, who has been attending the University of Michigan School of Public Health and Dr. Hubert W. Smith of the University of Toronto, Canada, visited the Laboratories during the month.

\* \* \*

Six venereal disease investigators have been added to the staff of the Section of Venereal Disease Control. They have been assigned to the following six areas: Macomb, Oakland and Monroe Counties; Port Huron and Thumb area; City of Saginaw; County of Muskegon; Calhoun and Kalamazoo Counties; and the Upper Peninsula.

The investigators work under the direction of the local health officers and are available to assist practicing physicians in getting lapsed cases to come back for treatment, or in making contact investigations.

\* \* \*

An additional laboratory has qualified for performance of enteric examinations in Michigan. It is Arthur A. Humphrey Clinical Laboratory, 914 Security Bank Building, Battle Creek, Michigan.



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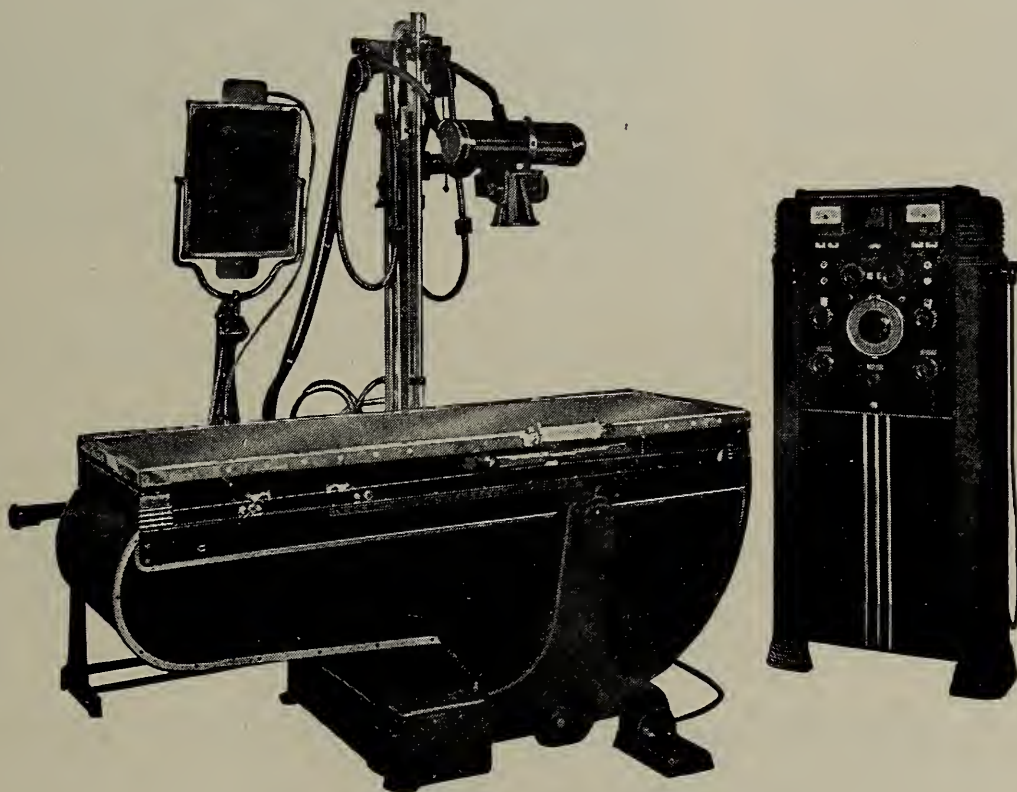
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# MICHIGAN STATE MEDICAL SOCIETY

## Supplemental Roster 1949

The following names were certified by County Medical Societies after the Roster had been sent to the publishers of THE JOURNAL for publication in the July number.

### Alpena County

O'Boyle, C. P.....Alpena

### Berrien County

Lawton, C. V.....Benton Harbor  
Lindenfeld, F. H.....Niles  
Pritchard, H. M.....Niles  
Rice, F. A.....Niles  
Strayer, J. C.....Buchanan

### Calhoun County

Hansen, Harvey C.....Battle Creek

### Clinton County

Henthorn, A. C.....St. Johns

### Eaton County

Arner, Fred L.....Bellevue  
Willits, C. O.....Charlotte

### Genesee County

Craig, William G.....Flint  
David, T. George.....Flint  
Evers, John W.....Flint  
Harrison, Leo D.....Flint  
Laird, James I.....Goodrich  
Osher, Seymour L.....Flint  
Shapiro, Joseph.....Flint  
Tuuri, Arthur L.....Flint

### Grand Traverse-Leelanau-Benzie Counties

Thacker, Fred R.....Frankfort  
Trautman, Frederick D.....Frankfort  
Wilcox, Paul H.....Traverse City  
Weitz, Harry L.....Traverse City

### Hillsdale County

McFarland, O. G.....North Adams

### Ingham County

Meyer, Hugh R.....Lansing  
VanderSlic, E. R.....Lansing

### Kent County

Browning, E. S.....Grand Rapids  
Gosling, Robert J.....Grand Rapids  
Jelleman, John F.....Grand Rapids  
Mehney, Gayle H.....Grand Rapids  
Smith, Ferris N.....Grand Rapids

### Livingston County

Steinfeld, Winton.....Tucson, Ariz.

### Manistee County

Osborn, Samuel.....Manistee

### Marquette-Alger Counties

Sicotte, Isaiah.....Michigamme

### Oakland County

Hull, Robert P.....Ferndale  
Morton, James A.....Birmingham  
Seaborn, Arthur J.....Royal Oak

### St. Joseph County

Shaw, George D.....Three Rivers

### Tuscola County

Elmendorf, Edward N.....Vassar  
Von Renner, Otto.....Vassar

### Washtenaw County

Oliphant, L. W.....Ann Arbor

### Wayne County

Bergman, Theodore.....Detroit  
Bloom, Arthur.....Detroit  
Clippert, J. C.....Grosse Isle  
Davison, Leo E.....Detroit  
Daniels, L. E.....Detroit  
Farbman, Simon.....Detroit  
Hedgeman, E. Chester.....Detroit  
Isaacson, Arthur.....Detroit  
Klosowski, Jos. K.....Detroit  
Lecklider, A. F.....Detroit  
May, Earl W. (A).....Highland Park  
Molnar, Stephen.....Dearborn  
Metes, John S.....Detroit  
Robb, Herbert F.\*.....Detroit  
Robb, Herbert J.....Belleville  
Spurrier, Ethelbert.....Detroit  
Selman, J. H.....Detroit  
Taylor, J. L.....Detroit

### Wexford-Missaukee Counties

Inman, J. C.....Lake City

\*Should have been listed in July.

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## NEWS MEDICAL

### Michigan Authors

Henry C. Stalzstein, M.D., of Detroit, published a paper: "Radical Removal of Uterus Vagina and Rectum for Far Advanced Carcinoma of the Uterus and Vagina" in Harper Hospital Bulletin for January-February, 1949.

Mario S. Cioffari, M.D., Detroit, published a paper: "Dietary Control of Dental Caries" in the Archives of Pediatrics for June, 1949.

Steven C. Mason, M.D., and H. M. Pollard, M.D., of Ann Arbor published a paper: "Peptic Ulcer Following Splanchnicectomy; a Report of Thirteen Cases" in Surgery, Gynecology and Obstetrics for September, 1949.

J. Forbes Rogers, M.D., Raymond J. Barrett, M.D., and Conrad R. Lam, M.D., of Detroit published a paper: "Experimental Intravascular Thrombosis in Surgery, Gynecology and Obstetrics" for September, 1949.

Alex S. Friedlaender, M.D., and Sidney Friedlaender, M.D., Detroit, are authors of an original article "Correlation of Experimental Data with Clinical Behavior of Synthetic Antihistaminic Drugs" which was published in *Annals of Surgery*, January-February number, 1949.

\* \* \*

**Wisconsin Speakers.**—On the program of the Wisconsin State Medical Society Annual Session, October 3, 4, and 5, 1949, at Milwaukee were the following from Michigan:

Arthur C. Curtis, M.D., Ann Arbor, "Sarcoid Disease: "Modern Treatment of Syphilis."

Ivan B. Taylor, M.D., Detroit: "Anesthesia, the Weakest Link in Surgical Procedure."

Frederick A. Collier, M.D., Ann Arbor: "The Diagnosis and Management of Lesions of the Breast." "Cancer of the Gastrointestinal Tract." "Treatment of Renal Insufficiency in the Surgical Patient."

A. D. Reudeman, M.D., Detroit: "Use of Beta Radiation in Ophthalmology."

\* \* \*

**Diabetic detection** week has been announced for October 10 through October 16. We are told that there are a million undiagnosed diabetics in the country and are urged to make a urine test for every patient we see during this detection week. It will take only a minute and might mean the recognition of a serious threat to the welfare of the patient.

\* \* \*

**Administration Strategy.**—News out of Washington is that the administration, in an attempt to smoke-screen the five percenter scandal, will try for favorable publicity against the "lobbies." The "doctors' lobby" will be shown up on account of its pernicious fight against

"health insurance"—forgetting to put in the word "compulsory."

The 1950 political campaign has opened with President Truman's Labor Day speeches. He mentions the "privileged classes" and his determination to have all of his social program.

\* \* \*

Alexander M. Campbell, M.D., long-time practitioner and in recent years Advisor in Obstetrics and Gynecology to the Medical Profession of Michigan, was featured in the *Grand Rapids Herald* of August 21, under the headlines "Retiring Doctor Looks Ahead." The sub-title indicates the gist of the eulogistic articles: "'Dad'—a Hard Won Title."

Congratulations, Dr. Campbell, and may you retire into a more active sphere of postgraduate education of our medical men.

\* \* \*

The Berrien County Medical Society's meeting of September 15 featured Robert Berry, M.D. of Ann Arbor who spoke on "Neoplasms of the Colon." The program was supplied through the courtesy of the Cancer Society.

\* \* \*

Michigan has 7,127 living physicians, as of June, 1948, according to a survey recently printed in JAMA by the Bureau of Medical Economic Research of the American Medical Association. This total ranks eighth among the states with New York first with 30,970; California being second with 16,069; Pennsylvania third with 14,633; Illinois fourth with 13,307; Ohio fifth with 10,091; Massachusetts sixth with 9,102; and Texas seventh with 7,621.

\* \* \*

Harry Eagle says that "reinfections with syphilis are usually observed in patients treated in the early stages and only rarely in patients treated after spontaneous disappearance of the secondary lesions."

It may be that late starting of treatment may only reduce the number of organisms; not completely cure.

Be suspicious of any rash. Investigate clinically and use the laboratory helps.

Don't forget to report all cases to your health department and check all contacts. They will help you and the contacts.

\* \* \*

E. F. Sladek, M.D., Traverse City, as President of the Michigan State Medical Society, was signally honored by members of his county medical Society, the Grand Traverse-Leelanau-Benzie Society, on September 6. At a testimonial dinner in honor of President Sladek, the

(Continued on Page 1300)



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(Continued from Page 1298)

long-time member of the Grand Traverse group was presented with a handsome wrist watch and with many eulogistic words concerning his contributions to Medicine over the years.

\* \* \*

A. C. Ivy, M.D., of the Department of Clinical Science, University of Illinois (1853 W. Polk Street, Chicago 12) requests physicians to co-operate in assembling material on this interesting study: "The hereditary predisposition in twins to tuberculosis, diabetes, and tumor formations." Dr. Ivy wishes to have cases sent to him in which (1) one or more twins develop peptic ulcers; (2) the site of the ulcer; (3) the age of onset of ulcer; (4) the type of twins (monovular or diovular); (5) the sex of the twins; (6) the date of birth of the twins, and (7) the number and age of the brothers and sisters, with the absence or presence of ulcer in each.

\* \* \*

The Eaton County Medical Society, Michigan, is conducting a survey of apparently well persons to exclude cancer of the mouth, skin, breast, cervix and rectum; the survey is in co-operation with the Eaton County Farm Bureau Women. Included in this survey is an estimate of the cardiac status. For detailed information, write G. C. Stucky, M.D., Cochran at Lovett, Charlotte, Michigan.

\* \* \*

During the 35th Clinical Congress of the American College of Surgeons at the Stevens Hotel, Chicago, October 17-21, the 28th Annual Hospital Standardization Conference was held, beginning Monday, October 17. The first Standardization Conference was held thirty-two years ago in Chicago (November, 1917).

\* \* \*

The American Association for the Advancement of Science will hold its 116th meeting in New York City, December 26-31, 1949. For information and program, write the Association, 15 Massachusetts Ave. N. W., Washington 5, D. C.

\* \* \*

Peter M. Murray, M.D., New York, recently elected as a delegate from New York State Medical Society, will be the first negro member of the AMA House of Delegates when he is seated at the San Francisco Session in June, 1950. Mr. Murray was born in New Orleans and graduated from Howard University School of Medicine of which University he now is a trustee. He has practiced in New York since 1920. Dr. Murray is a past president of the National Medical Association, a Fellow of the New York Academy of Medicine, Diplomate of the American Board of Obstetrics and Gynecology, Fellow of the American College of Surgeons, and Fellow of the International College of Surgeons. He has been a member of the New York State Medical Society House of Delegates for twelve years.

\* \* \*

Joseph L. Zemens, M.D., Detroit, Medical Director of Packard Motor Car Company, is president for the year

(Continued on Page 1302)



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(Continued from Page 1300)

★

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1949-50 of the Michigan Association of Industrial Physicians and Surgeons. Dr. Zemens was chosen as president-elect of the Association, and assumed the presidency when K. E. Markuson, M.D., formerly of Lansing, left Michigan to reside in the State of Connecticut.

Congratulations, Dr. Zemens!

\* \* \*

*The American College of Chest Physicians* announces a postgraduate course in diseases of the chest to be held at the Hotel New Yorker, New York City, from November 14 through 19, 1949. For information and complete program, write Frank R. Ferlaine, M.D., Secretary, 500 N. Dearborn St., Chicago 10, Illinois.

\* \* \*

*At the Third Annual Michigan Rural Health Conference*, to be held at the Civic Auditorium, Grand Rapids, October 28-29, Dr. J. O. Christianson, of Minneapolis, will speak on "Rediscovering America." Other speakers include Paul D. Bagwell of Michigan State College, East Lansing, past president of the National Junior Chamber of Commerce; J. S. DeTar, M.D., Milan; and Mrs. Charles Sewell of Chicago. The 1949 Rural Health Conference is being sponsored by MSMS, the Michigan Foundation for Medical and Health Education, Inc., and some forty other agencies interested in rural health. For complete program, write the Conference Secretary, c/o Michigan Health Council, 706 N. Washington St., Lansing 6.

\* \* \*

*E. H. Rowley Company* of Detroit has opened a branch store in Lansing, Michigan, at 1129 N. Washington, making available all types of orthopedic and prosthetic appliances. A valuable service in the orthopedic appliance field has been initiated by E. F. Schmitt of the Rowley Company. It consists of a free training school where amputees are taught the proper use of their artificial limbs. Classes are held at the company's offices in a specially constructed room complete with balance rails, narrow stairways, and ramps, designed to simulate conditions that the amputee will encounter in everyday living. The classes have been invaluable for restoring confidence in the amputee and making for maximum efficiency in the use of the artificial limb.

\* \* \*

*The International College of Surgeons* will hold its Seventh International Assembly in Buenos Aires, Argentina, in August, 1950. For travel plans and copy of the scientific program, write the Secretary-General, 1516 Lake Shore Drive, Chicago 10, Ill.

\* \* \*

*The American Academy of General Practice of Wayne County* announces the following speakers on the program of its Third Annual Postgraduate Lectures for general practitioners, October 26-27, 1949, in Henry Ford Hospital Auditorium, Detroit: Roy D. McClure, M.D., E. Clarkson Long, M.D., Frank R. Menagh, M.D., F. Janney

(Continued on Page 1304)



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(Continued from Page 1302)

Smith, M.D., John W. Keyes, M.D., J. P. Pratt, M.D., D. E. Szilagyi, M.D., Dwight C. Ensign, M.D., Howard P. Doub, M.D., Conrad R. Lam, M.D., Joseph A. Johnston, M.D., Gerald O. Grain, M.D., Frank W. Hartman, M.D., Robert H. Durham, M.D., Edward L. Quinn, M.D., Arthur B. McGraw, M.D., Ormond S. Culp, M.D., Frank J. Sladen, M.D., William L. Lowrie, Jr., M.D., Thomas J. Heldt, M.D., Clarke M. McColl, M.D., Eugene J. Alexander, M.D., Leston S. Whitehead, M.D., John G. Mateer, M.D., Lawrence S. Fallis, M.D., Joseph H. Shaffer, M.D., and Daniel D. Hurst, M.D.

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\* \* \*

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\* \* \*

The American Academy of Pediatrics will meet in San Francisco in November and the Illinois Chairman, Eugene T. McEnery, has asked that we tell you that: "Fellows of the American Academy of Pediatrics and their friends are cordially invited to join the Special Train for the Annual Meeting in November, from Chicago to San Francisco. A booklet descriptive of the tour may be secured from Mr. W. M. Maloney, Passenger Agent, Room 711, 105 West Adams Street, Chicago 3, Illinois."

\* \* \*

James J. Lightbody, M.D., Detroit, President of the Wayne County Medical Society, has been appointed as medical director of the Michigan Chapter, Arthritis and Rheumatism Foundation. Offices of the Chapter are at 7338 Woodward Ave., Detroit.

\* \* \*

The National Society for Crippled Children and Adults has been voted an additional grant of \$10,000 by Alpha Chi Omega, national women's fraternity, to continue a jointly sponsored program for training professional personnel to work with the cerebral palsied. The first grant of the fraternity was for \$15,000 for the two-year program.

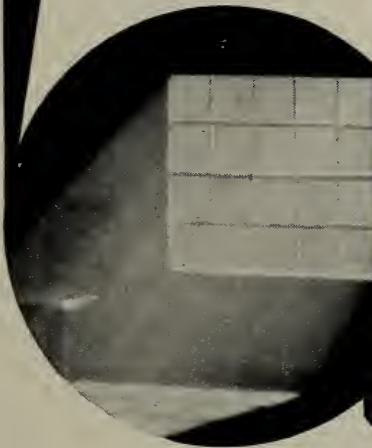
\* \* \*

The Crippled and Afflicted Children's Acts require that payment shall be refused for any billing received by the Michigan Crippled Children Commission more than sixty days after the discharge of the patient from the hospital. Since this is a statutory requirement and not an administrative decision, it is important that physicians realize that the Commission has no legal authority to acknowledge billing that is delinquent beyond the sixty-day period.

A period of approximately two years has elapsed since

(Continued on Page 1306)

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(Continued from Page 1304)

the statutes were amended permitting the physicians to bill the Commission direct rather than having the hospitals bill for their services. Shortly after the change in this statutory requirement there was some confusion in billing procedures, and concessions were made during that transition. However, there is no further excuse for misunderstanding of the legal requirements and if physician's billing is received more than sixty days after the discharge of the patient from the hospital the Commission must necessarily deny payment for same.

It is recommended by the Commission that the physicians bill the Commission monthly for services rendered to patients under the provisions of the Crippled or Afflicted Children's Acts and by so doing they will facilitate the early processing of these billings and eliminate the possibility of delinquent billings.

\* \* \*

Roland Randolph's many friends will be happy to learn that he is again enjoying robust health and has rejoined his "alma mater," the Randolph Surgical Supply Company of Detroit, as Director of Sales.

\* \* \*

Joseph G. Molner, M.D. Detroit, has been selected as Health Commissioner of the City of Detroit by the Board of Health Commissioners. Congratulations, Dr. Molner, and full success in your big job!

\* \* \*

Roland M. Athay, M.D., Detroit, has been appointed Medical Superintendent of Wayne County General Hospital, Eloise. Congratulations, Dr. Athay, and all success!

# VAGINAL CAPSULES



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## PRACTICAL OFFICE PROCEDURES IN GYNECOLOGY

(Continued from Page 1274)

lin ointment *must* be washed off with soap and water in four hours. If left on too long, the reaction from the ointment will cause marked edema and pain. Twice daily application of any anesthetic ointment for a couple of days will make the patient very comfortable, and she may continue her normal routine. The condylomata will shrivel off and disappear in one to two weeks. Reapplication, if necessary, should be delayed for seven to ten days. The results are good with soft warts; however, in our experience the fibrotic or "hard" warts are not affected by this therapy.

10. *Urethral caruncles* may cause ascending trigonitis and cystitis, with resultant tenesmus of the urinary bladder with frequency and urgency. However, many times these lesions are asymptomatic. Our therapy consists of electrocauterization. The urethra is anesthetized with 1 per cent procaine. The nasal tip cautery is used to destroy the everted urethra mucosa. The patient is advised to take warm sitz baths and urinate in the warm water. Some will have dysuria for six to twelve hours, but this is transient. Following the cauterization, the patient returns weekly for four to five times for urethral dilatations. A graduated urethral catheter dilator is used. The results have been quite satisfactory.

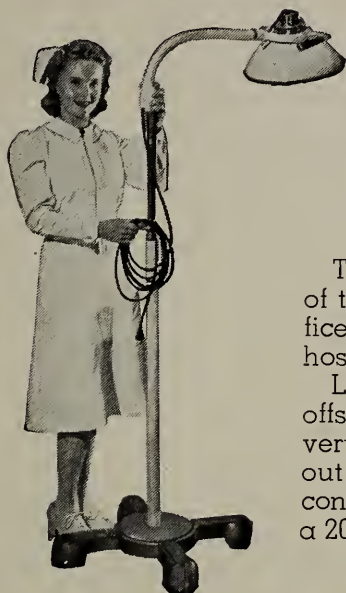
### Summary and Conclusions

1. Ten practical office procedures and common conditions in gynecology are presented.
2. Indications, contraindications and techniques are discussed.
3. These procedures have been proved safe and effective, and do not call for hospitalization of the patient.
4. These same procedures are used both in the clinic and on private patients.

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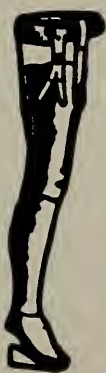
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**NUTRITION AND DIET IN HEALTH AND DISEASE:** By James S. McLester, M.D., Professor of Medicine, University of Alabama, Birmingham. New, 5th Edition. 800 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$9.00.

Values of foods, their composition, and utilization constitutes the subject matter of this volume of approximately 800 pages. It gives in great detail the forms and amounts of foods needed in various types of disease, tabulations of values, methods of preservation and utilization. Feeding of certain classes of patients such as infants, fertility, deficiency diseases, are given chapters and detailed study. This book is so full of the latest information, such as vitamins and diets for numerous conditions that it should be on the book shelf of every hospital as well as the doctor dealing with nutrition.

\* \* \*

**A DESCRIPTIVE ATLAS OF RADIOGRAPHS AN AID TO MODERN CLINICAL METHODS.** By A. P. Bertwistle, M.D., Ch.B., F.R.C.S.Ed. Seventh Edition, Revised and Enlarged. With 980 illustrations. St. Louis: C. V. Mosby Co., 1949. Price \$16.00.

When reviewing a book, one must keep in mind the reason for which the book was written. The introduction, stated: "The object of this book is to show the immense possibilities of x-rays. It is an attempt to

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portray, as far as it is possible in the space available, as many of the normal and abnormal conditions that are encountered in practice. It is written by a clinician for clinicians." Further down in the introduction, one finds this phrase: ". . ., it is primarily intended for the use of the clinician who, without being concerned with the technical side, yet desires to know what x-rays are capable of revealing to him."

As stated by the author, this text is intended primarily for the clinician. It is well organized and very well illustrated. The illustrations are numerous and graphic. An exceedingly wide range of subjects is covered. For the clinician who desires to know whether the use of x-ray can help with a specific diagnosis, this book will be an excellent guide.

The author sets out to do a specific thing, and he has accomplished his purpose.

G.T.P.

\* \* \*

MANUAL OF THE INTERNATIONAL STATISTICAL CLASSIFICATION OF DISEASES, INJURIES AND CAUSES OF DEATH. Sixth Revision of the International Lists of Diseases and Causes of Death. Adopted 1948, Volume 1. Geneva, Switzerland: World Health Organization, 1948.

For the first time there is international agreement on a uniform method of selecting the main cause of death to be tabulated for statistical purposes. This is distinctly different from a nomenclature and classification of diseases. The first international conference took place in Paris in 1900, and revisions have been accomplished periodically since then. Every conceivable cause of death is



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grouped in certain categories and given numbers on a three-digit basis as 014. If there are subdivisions, the number is further divided (014.2) making the four-digit categories, and a fifth is also included with a letter, thus—E972.3. This is a very interesting book, and would be indispensable to a medical statistician.

\* \* \*

BRIDGES' DIETETICS FOR THE CLINICIAN. By Harry Johnson, M.D., with twenty-seven contributors. 898 pages. Philadelphia: Lea and Febiger, 1949. Price \$12.00.

This fifth edition supplies a practical addition to the armamentarium of the general practitioner, the nutritional expert, and the home economist. It is a book on dietary management—including cognizance of the analysis of foods in the edible state—which is readily understandable and from which practice can be immediately instituted. The contributors include some of the great names in Nutritional Medicine.

The book is divided into three parts. Part I is devoted to General Consideration (mechanics, physiology and chemistry of digestion, vitamins, structure and practical evaluation of foods, tabulation of food factors, and acid-base factors in nutrition). Part II gives the dietetic management of diseases of adults. Part III (appendix) contains a valuable table of nutritive and caloric values of foods, covering 226 pages.

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## HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

September 18 and 23, 1949

- Monthly financial reports and bills payable were presented, studied and approved.
- Harry B. Zemmer, M.D., Lapeer, was appointed by President E. F. Sladek as Councilor of the 7th District, to serve the unexpired term of the late T. E. DeGurse, M.D.
- The Committee to Study Health Plans reported on its three meetings (July 26, August 15, and September 12). The following recommendation of the Committee was approved by The Council:

“The Committee recommends, that in keeping with this concept, The House of Delegates of the Michigan State Medical Society request Michigan Medical Service to:

  - (a) Increase the income limits to \$5,000
  - (b) Increase the schedule of fees paid physicians
  - (c) Provide that all hospital services of physicians, both Medical and Surgical, be included as benefits
  - (d) Continue all the present forms of contracts affecting the \$2,500.00 income limits.”
- Progress report of the Treasurer (A. S. Brunk, M.D., Detroit) was approved. He was authorized to sell any bonds in the portfolio and reinvest the money in Government bonds, as per recommendation made by the Finance Committee in July, 1949.
- Supplemental Report of The Council was presented, amended in several paragraphs, and approved for presentation to the House of Delegates on September 19, 1949.
- Committee reports were approved from the Rheumatic Fever Control Committee, the Public Relations Committee, the Special Committee on Education, the Committee on Uniform Fee Schedule for Governmental Agencies, and the Special Committee on Post-payment for Medical Care to Old-Age Recipients.
- President E. F. Sladek, M.D., reported that the Michigan State Board of Registration in Medicine has appointed a committee of five to meet jointly with the MSMS committee re Study of Medical Practice Acts. The personnel is composed of L. J. Gariepy, M.D., Detroit, Chairman; Cecil Corley, M.D., Jackson; F. L. Troost, M.D., Holt; E. W. Schnoor, M.D. and J. E. McIntyre, M.D., ex officio members.
- The Mid-Summer meeting of The Council was scheduled for July 16-17-18, 1950, at Ramona Park Hotel, Harbor Springs.
- Michigan's Foremost Family Physician: The Special Committee (R. J. Hubbell, M.D., Chairman, W. S. Jones, M.D. and E. A. Osius, M.D.) nominated John C. Maxwell, M.D., Paw Paw. Nomination was approved by The Council.
- Sarah S. Schooten, M.D., was appointed as MSMS representative to the Michigan Nursing Center Association.
- A Clinic for the Study of Alcoholism, to be developed by Wayne University, was presented by W. B. Harm, M.D., and approved by The Council.
- The Public Relations Counsel's monthly report included information on syndication of the “Tell Me, Doctor” program and on the rental of the MSMS movie, “To Your Health”; also that the Michigan State College health survey had been completed—complete copies of the report were presented to the Councilors, for study; Mr. Brenneman also invited all members of The Council to attend the Michigan Rural Health Conference in Grand Rapids, October 28-29. “It's No Bargain” the new MSMS pamphlet for members of the Woman's Auxiliary and other women has been printed—eventually 125,000 of these pamphlets will be distributed.
- Resolutions re recent deceased officers of MSMS, Councilor T. E. DeGurse, M.D., and AMA Delegate T. K. Gruber, M.D., were read, ap-

(Continued on Page 1326)

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# HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

(Continued from Page 1324)

- proved by The Council, and referred to the House of Delegates.
- At the September 23 meeting, Chairman O. O. Beck, M.D., expressed regret at the departure from The Council of Councilor Dean W. Myers, M.D., and Past President P. L. Ledwidge, M.D. He welcomed the two new Councilors, Drs. J. S. DeTar, Milan, and L. W. Hull, Detroit, and the new Speaker of the House of Delegates R. H. Baker, M.D., Pontiac.
  - Reorganization of The Council: O. O. Beck, M.D., Birmingham, was chosen to succeed himself as Chairman of The Council; R. J. Hubbell, M.D., Kalamazoo, succeeded himself as Vice Chairman of The Council; E. A. Osius, M.D., Detroit, was elected as Chairman of the Finance Committee; F. H. Drummond, M.D., Kawkawlin, was elected as Chairman of the Publication Committee; and J. Duane Miller, M.D., Grand Rapids, was elected as Chairman of the County Societies Committee.
  - Minutes of Joint Meeting of County Societies Committee of The Council and the Tuberculosis Control Committee were read and approved.
  - Several matters referred to The Council by the 1949 House of Delegates were acted upon: (a) Resolution on streamlining of AMA; (b) Resolution on dispensing of eyeglasses; (c) Study of Councilor Districts (referred by The Council to a Special Committee); and (d) Consultation of Doctors of Medicine with non-medical practitioners.
  - Nominations for membership on Michigan State Board of Registration in Medicine were made to the Governor for the five vacancies occurring on September 30, 1949, in accordance with the Medical Practice Act, Section 1.
  - Report of Publication Committee (meeting of September 22) was approved.

- President W. E. Barstow, M.D., announced appointment of chairmen and members of MSMS committees for the year 1949-1950, which were confirmed by The Council.
- E. A. Osius, M.D., Chairman of the Liaison Committee with the Michigan Medical Assistants Society, reported on the September 22 meeting of this new organization and the adoption of a constitution and by-laws, previously approved by MSMS.
- Official vote of thanks to all who helped make successful the 1949 Annual Session was placed on the minutes of The Council.

## GRASS ROOTS CONFERENCE

The Sixth National Conference of County Medical Society Officers will be held in Washington, D. C., during the Clinical Session of the A.M.A. The meeting is scheduled for December 8 at 8:00 p.m. in the Hotel Statler. All doctors and their wives are invited to attend.

## Community Health Leadership

### Outstanding Local Achievements

The Miracle of Flint—A. L. TUURI, M.D., Medical Director, Mott Children's Center, Flint, Michigan.  
Erie County Rings The Bell—ROY L. SCOTT, M.D., President, Medical Society, County of Erie, Buffalo, New York.

### National Programs Depend on Local Achievements

The American Legion's Community Development Program—GEORGE N. CRAIG, National Commander, The American Legion, Brazil, Indiana.  
The Program of the United Mine Workers—WARREN F. DRAPER, M.D., Executive Medical Officer, Welfare and Retirement Fund, U.M.W. of America, Washington, D. C.

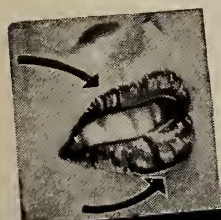
### The Doctor's Prognosis

JOSEPH WALL, M.D., Past President, Medical Society, District of Columbia, Washington, D. C.

Here is a program that should be of interest not only to every medical society officer but also to every member. Community Health Leadership—the co-operation of doctors and laymen where it is needed most and can accomplish the most—is the theme.

\* \* \*

Tuberculosis mortality in the U. S. Zone of Germany began to rise promptly at the beginning of World War II, reached a peak in 1945 and progressively declined in 1946 and 1947. The extent of the rise was only moderate as compared with that in several other European nations.—PHILIP SARTWELL, M.D., CHARLES H. MOSELEY, M.D. and ESMOND R. LONG, M.D., *American Review of Tuberculosis*, May, 1949.



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# Osteopaths Demand Right to Care for Crippled-Afflicted Children

The Michigan Association of Osteopathic Physicians and Surgeons recently petitioned the Legislative Committee on Administrative Rules, State of Michigan, for a change in the rules and regulations of the Michigan Crippled Children Commission so that Michigan osteopaths might be entitled, *legally*, to render service to crippled and afflicted children under Michigan's two Acts which authorize medical service to these wards of the state.

The Legislative Committee heard the osteopaths at an October 5 hearing in Lansing. Besides the petition and an exhaustive brief of the osteopaths, the Legislative Committee received a memorandum from Stephen J. Roth, Michigan Attorney General, which stated that the Legislative Committee "has no power to consider such plan."

The petition of the osteopaths, the memorandum of the Michigan Attorney General, and the final decision of the Legislation Committee on Administrative Rules are printed *in toto*, as follows:

## MICHIGAN CRIPPLED CHILDREN'S COMMISSION

STATE OF MICHIGAN }  
COUNTY OF INGHAM }<sup>ss.</sup>

IN THE MATTER OF RECOGNITION  
OF QUALIFIED OSTEOPATHIC PHYSICIANS  
AND HOSPITALS FOR CARE OF  
CRIPPLED CHILDREN }

### PETITION FOR A CHANGE IN THE RULES AND REGULATIONS OF THE COMMISSION.

Your Petitioner, the Michigan Association of Osteopathic Physicians and Surgeons, as official representative for all the Osteopathic physicians and surgeons of Michigan, respectfully petitions that the following changes in the rules and regulations of the Michigan Crippled Children's Commission be made:

1. That rules 352 and 353 of Section VII of the rules and regulations of the Commission be deleted, and subsection (a) of section 362 of section VII be amended to read as follows: "For crippled children the hospital must maintain orthopedic equipment, a physical therapy department, an approved attending orthopedic surgeon and approved physiotherapist. Other desirable services are:

Pediatrics Department	Anesthesia Department
Clinical Laboratory	Eye, Ear, Nose, Throat Dept.
X-ray Department	Out-patient Department
Surgical Department	Orthopedic Department

2. That the rules and regulations of the Commission incorporated in the state plan presented for the approval of the Children's Bureau of the Federal Security Administration be amended to permit the participation in the care of crippled children by all qualified physicians and hospitals without requiring either directly or in-

directly membership to any particular professional association and without discriminating against any practitioner or hospital by reason of the school of practice which that hospital or physician represents.

Your Petitioner requests the changes in the rules and regulations of the Commission for the reason that they are:

1. Arbitrary in nature.
2. Discriminatory in violation of section 24.78a of the Compiled Laws of Michigan, 1948.
3. In excess of the authority granted to the commission by the legislature in that the rules:
  - (a) Deny equal protection of the law to crippled children being cared for by osteopathic physicians and to their physicians.
  - (b) Tend to foster a monopoly in restraint of trade.

WHEREFORE, your Petitioner prays that the rules and regulations of the Michigan Crippled Children's Commission be amended as requested by this petition.

Michigan Association of Osteopathic Physicians and Surgeons

By HARRY STIMSON, D.O., President

Subscribed and sworn to before me this 22nd day of June, 1949.

OLIVE P. BROOKS,  
Notary Public

My commission Expires:  
February 12, 1950.

Below is the section referred to by Dr. Harry Stimson being Section 8a of Act 88 of 1943 as added by Act 35 of 1947, (the act which created this committee)

"Sec. 8a. No rule, or exception to any rule, shall discriminate for or against any person, and each and every person affected by any rule shall be entitled to the same benefits as any other person under the same or similar circumstances."

G. C.

\* \* \*

### Memorandum

To: THE JOINT LEGISLATIVE COMMITTEE  
ON ADMINISTRATIVE RULES

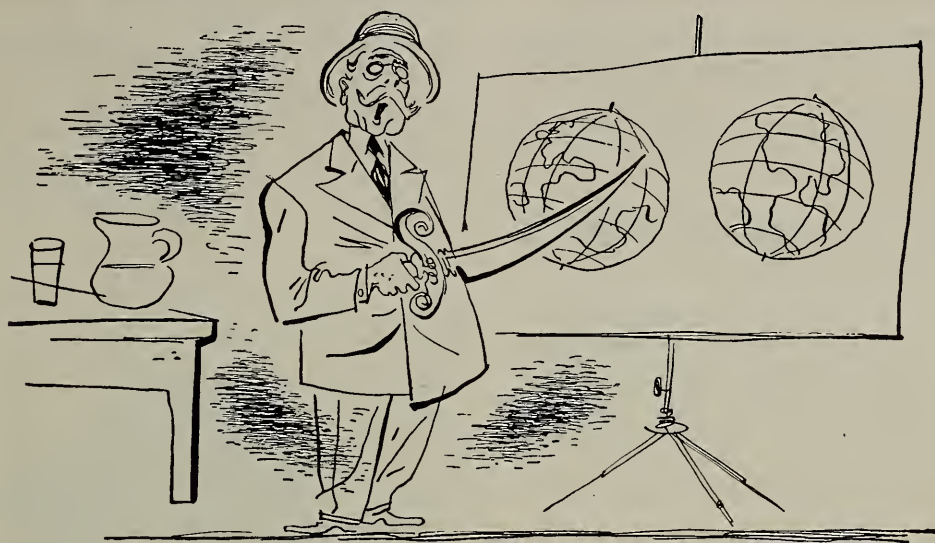
#### Rules of the Michigan Crippled Children Commission

The Attorney General was asked to represent the Michigan Crippled Children Commission at the hearing on October 5, 1949, before the Legislative Interim Committee on Administrative Rules. It is one of the functions of the Attorney General to act as counsel for and advise state agencies. This function includes the duty of the Attorney General to give legal counsel to the Legislature of which this Committee is a part, when requested. The Attorney General therefore feels that if any issue as to the desirability of the rules here challenged could be lawfully considered by this Committee, it would be purely an administrative matter in which the Attorney General should not be concerned. However, the Attorney General considers it proper to advise this Committee as to its powers under Act No. 88, P.A. 1943, as amended, and as to the legality of the rules here challenged.

The Michigan Association of Osteopathic Physicians and Surgeons has filed a petition asking that the following rules of the Crippled Children Commission be deleted:

352. Hospitals shall be on the registered list of the American Medical Association.

(Continued on Page 1330)



## WORLD TRAVELER . . . Dietary Dub

Food customs? He can describe the bill of fare in far away places some people never heard of. His personal eating habits, however, are those of most men in public life—a feast when the hectic schedule permits, just a bite here and there between times.

And like innumerable others who will not or cannot eat properly, these are the half-well, half-sick cases you recognize as subclinical vitamin deficiencies. Your first move

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ABBOTT LABORATORIES, North Chicago, Illinois.



SPECIFY

# ABBOTT Vitamin Products



## CRIPPLED-AFFLICTED CHILDREN

(Continued from Page 1328)

353. Approval by the American College of Surgeons is desirable. (In cities with a population of over 25,000, hospitals should be approved by the American College of Surgeons.)

Also that the following rule be amended as follows:

362a. For crippled children the hospital must maintain orthopedic equipment, a Physical Therapy Department, an approved attending Orthopedic Surgeon and an approved Physiotherapist."

Petitioner claims that these rules violate Section 8a of Act No. 88, P.A. 1943, as amended by Act No. 35, P.A. 1947, which provides:

"No rule, or exception to any rule, shall discriminate for or against any person, and each and every person affected by any rule shall be entitled to the same benefits as any other person under the same or similar circumstances."

Petitioner claims that the rules are unauthorized by the statutes giving the Crippled Children Commission the rule-making power for the reason that they (a) deny equal protection of the law to crippled children being cared for by osteopathic physicians and to their physicians and (b) tend to foster a monopoly in restraint of trade.

Paragraph number two of the petition will be considered separately.

### *Powers of the Legislature and the Interim Committee*

Under the 1947 amendment to said Act No. 88, P.A. 1943, the Legislature reserves the right to approve, alter, suspend or abrogate any rule promulgated pursuant to the provisions of this act. Section 18 provides that all rules heretofore or hereafter promulgated by a state agency shall be transmitted to the Secretary of the Senate and the Clerk of the House and to each member of the Legislature before the first day of the regular session following the promulgation of such rules; rules promulgated during a session must likewise be so distributed. Section 8d provides in substance that rules promulgated and not submitted to the Legislature shall be filed as in the preceding section and shall be referred to any Joint Committee on Administrative Rules created as provided in Section 8e. Section 8e creates this Joint Committee on Administrative Rules, empowered to meet between sessions of the Legislature, and to which shall be referred all rules promulgated pursuant to this act and which have not been theretofore considered by the Legislature. The section then provides:

"\* \* \* The committee so created shall have the power to consider and to approve the operation of any such rule and to suspend until the next regular session of the legislature the operation of any such rule not in conformity with the statute under which it was promulgated. All such determinations by the committee on suspension of a rule shall be final on matters of fact, but shall be reviewable as to law. All rules so considered by the committee shall be referred by the secretary of the Senate and clerk of the House of Representatives in the same manner as provided for reference of rules under section 8b hereof."

Under the amended act *only the Legislature* can delete or amend any administrative rule. This Committee is not given that power. It therefore has no power to grant the prayer of plaintiff's petition, to delete certain rules and amend others. The powers of the Committee are limited to considering and approving the *operation* of rules or considering and suspending the *operation* of rules, unless such rules have previously been considered by the Legislature; if they have been so considered, then this Committee is given no power even to consider them.

If they are rules that can be considered by this Committee, its power to suspend any rule is limited to a rule "not in conformity with the statute under which it was promulgated." In this case the statutes under which the rules were promulgated are the so-called Crippled Children's Act, No. 158, P.A. 1937, as amended, and the Afflicted Children's Act, No. 283, P.A. 1939, as amended.

The rules in question were promulgated long before Act No. 35, P.A. 1947, creating this Committee, was enacted, and under Act No. 88, P.A. 1943, were passed upon by the Attorney General and by him declared legal. They have been in operation since 1945, and have been submitted to the Legislature under amendatory Act No. 35, P.A. 1947, and it would seem that it should be presumed that they have been "considered" by the Legislature. If that is the case then there is nothing validly before this Committee.

Assuming that these rules have not been considered by the Legislature, and that this Committee can entertain the petition, then its sole legal concern is whether or not the rules conform to the statutes under which the Crippled Children Commission promulgated them.

### *The Legality of the Challenged Rules*

Rules 352 and 353, which petitioner asks be deleted, apply to afflicted children. Rule 362a applies only to crippled children. Petitioner asks that the words "the hospital shall be approved by the American College of Surgeons" be deleted from rule 362a. Section 17 of the Crippled Children's Act, No. 158, P.A. 1937, as amended, restricts approval of hospitals for crippled children to those approved by the American College of Surgeons. This rule therefore is simply a repetition of the statutory provision. Any inquiry as to the conformity of the rule to the statute is foreclosed, and the Committee has no power to suspend this rule.

The Afflicted Children's Act in Section 3 authorizes the Commission to make and enforce rules and regulations concerning the approval of hospitals, and of treatment and handling of cases. Rules 352 and 353 requiring that hospitals shall be on the registered list of the American Medical Association are part of certain rules applicable in terms to both crippled and afflicted children. All hospitals approved by the American College of Surgeons are included in the American Medical Association list, so rules 352 and 353 actually apply only to afflicted children. I am therefore confused by the statement in petitioner's brief on page 24 that no change has been requested in the rules in regard to afflicted children, since petitioner has asked that rules 352 and 353 be deleted. Perhaps petitioner can clarify its position.

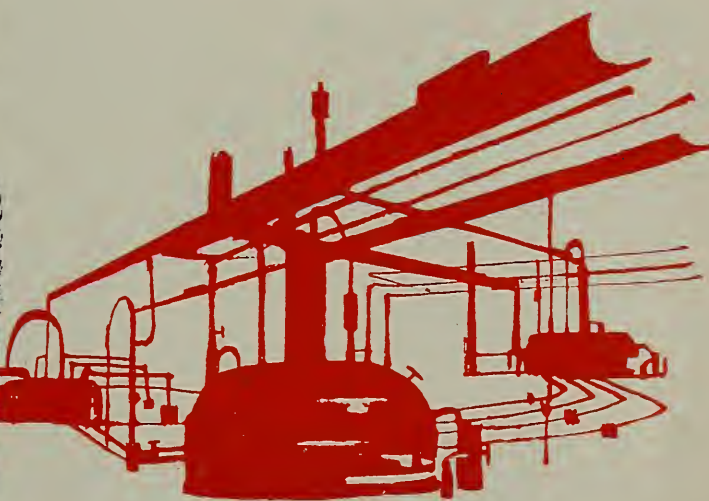
At all events the Afflicted Children's Act gives the Commission complete authority to approve hospitals. Rule 352 in effect sets a standard for such approval; namely, that it must be on the registered list of the American Medical Association, i.e., that it must meet the standards of the American Medical Association.

It seems clear that under the act the Commission is without authority to approve an osteopathic hospital. Act No. 162, P.A. 1903, which is the act providing for regulating and licensing osteopaths, provides in Section 7 that osteopathy "is hereby declared not to be the practice of medicine and surgery \* \* \*." The Afflicted Children's Act passed in 1939 states in Section 1—"It is hereby declared to be the policy of the State to provide medical and surgical care for afflicted children \* \* \*." Section 9, covering hospital care and treatment, states that the staff of the hospital receiving an afflicted child "shall be responsible for the prompt and proper medical or surgical treatment of the child \* \* \*." No child shall be sent to or received into said hospital unless there is a reasonable chance for him to be benefited by the proposed medical or surgical treatment \* \* \*." Section 13 sets a limit on professional fees, referring to them only as "surgical and/or medical fees." Section 17 provides for repayment by parents of an afflicted child where parents are financially able "for the actual cost of such medical or surgical treatment" on terms approved by the Probate Judge and the Commission. Thus the act contemplates only medical and surgical treatment—not osteopathic treatment. The Commission therefore even if not precluded from authorizing osteopathic hospitals

(Continued on Page 1332)

# Antibiotics

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# CRIPPLED-AFFLICTED CHILDREN

(Continued from Page 1330)

is certainly authorized to approve only hospitals meeting the standards of the American Medical Association.

Petitioner says that the rules mentioned are discriminatory, in violation of Section 8a of Act No. 88, P.A. 1943, as amended, quoted above.

This is a statutory expression of the constitutional provision that no person—in this case persons affected by administrative rules—shall be denied the equal protection of the laws.

To be entitled to equal protection of the laws a person must have a right which is entitled to protection. The principle is expressed in *Tennessee Electric Power Co. v. T.V.A.*, 306 U.S. 118, 137, in which the United States Supreme Court denied the plaintiff's claim to this protection, saying:

"The principle is without application unless the right invaded is a legal right—one of property, one arising out of contract, one protected against tortuous invasion, or one founded on a statute which confers a privilege." (underscoring mine)

Any supposed claim petitioner has is based on the two acts administered by the Crippled Children Commission. But no rights or privileges whatever are conferred on petitioner by these statutes nor on any physicians or hospitals. The only privileges conferred by either act are conferred by the State on crippled and afflicted children.

The equality protected is the equality of right, not of enjoyment. In *re Opinion of the Justices*, 39 A.L.R. 1023, 1027. See also *Chicago v. Rhine*, 363 Ill. 619, 105 A.L.R. 1045.

If the rules of the Commission had granted privileges to some afflicted children and denied it to others in like circumstances then Section 8a would be violated. The acts and the rules made pursuant to them are for the benefit of the children and not doctors or hospitals.

Petitioner says that the rules challenged deny equal protection of the law to crippled children being cared for by osteopathic physicians and their physicians. As stated above the Crippled Children's Act itself limits hospitals to those approved by the American College of Surgeons and rule 362a conforms. However, as far as the children are concerned they are the beneficiaries of the largess of the State which in these statutes has given them the privilege of the treatment conferred; namely, in hospitals approved by the Commission. No rule denies them equality of this privilege.

Petitioner's contention that the rules challenged tend to foster a monopoly in restraint of trade does not merit discussion. Maintenance of standards can scarcely be called fostering a monopoly.

Now taking up petitioner's request number two, it asks:

"That the rules and regulations of the Commission incorporated in the state plan presented for the approval of the Children's Bureau of the Federal Security Administration be amended to permit the participation in the care of crippled children by all qualified physicians and hospitals without requiring either directly or indirectly membership to any particular professional association and without discriminating against any practitioner or hospital by reason of the school of practice which that hospital or physician represents."

This request concerns only crippled children and the Crippled Children's Act. As shown above this Committee certainly has no authority by statute to amend rules.

Section 6 of the Crippled Children's Act is as follows, the underscoring being mine:

"The commission is hereby authorized:

- (a) To formulate and administer a detailed plan or plans for purposes specified in section five, and make such rules and regulations as may be necessary or desirable for the administration of such plans and the provisions of this act. Any such plan shall include provisions for
  - (1) Financial participation by the state;
  - (2) Administration of the plan or plans by the commission, and supervision by the commission of the administration of those services included in the plan or plans which are not administered directly by it;
  - (3) Such methods of administration as are necessary for efficient operation of the plan or plans;

- (4) Maintenance of records and preparation of reports of services rendered;
- (5) Co-operation with medical, health, nursing, and welfare groups and organizations, and with any agency of the state charged with the administration of laws providing for vocational rehabilitation and special education of physically handicapped children.
- (6) Carrying out the purposes specified in section five.
- (b) To expend in accordance with such plan or plans all funds made available to the state by the federal government for such purposes.
- (c) To co-operate with the federal government, under part two, title five of the federal social security act, through its appropriate agency or instrumentality, in developing, extending, and improving such services, and in the administration of such plan or plans."

"Plan or plans" refers to the entire program of care of crippled children. Just what petitioner means by referring to rules and regulations incorporated in the state plan is not clear. The plan or plans amount to a program and does not constitute any part of the published rules. This Committee has no power to consider such plan or plans. It is concerned only with the rules in the Administrative Code. The burden to show that any such rules are unauthorized is upon the one who challenges such rules. I do not see what there is here for this Committee to take up unless specific rules are indicated.

Respectfully submitted,

STEPHEN J. ROTH,  
Attorney General  
By G. DOUGLAS CLAPPERTON  
Assistant Attorney General

\* \* \*

## THE LEGISLATIVE COMMITTEE ON ADMINISTRATIVE RULES STATE OF MICHIGAN LANSING

October 6, 1949

Dr. Carlton Dean, Director,  
Crippled Children Commission,  
Hollister Building,  
Lansing, Michigan.

Dear Dr. Dean:

After careful consideration of the matters presented by the Michigan Crippled Children Commission and the representatives of the Michigan Association of Osteopathic Physicians and Surgeons, with reference to Rules No. 352, No. 353 and No. 362, of the Rules and Regulations of the Michigan Crippled Children Commission, the Legislative Committee on Administrative Rules reached the following decision:

The Chairman rules that all questions raised by the petition of the Michigan Association of Osteopathic Physicians and Surgeons were beyond the jurisdiction of the committee in that the rules under consideration were in conformity with the statute and that action by this committee on suspension of such rules would be tantamount to amending the statute, thereby usurping the power of the legislature.

The Chairman also stated, with the support of the committee that any grievance felt by the plaintiffs in this matter should be referred to the legislature at its next regular session.

We thank you for your courteous co-operation with our committee in this instance.

Very truly yours,

(Signed) HARRY PHILLIPS,  
Vice Chairman

A number of years ago, we remember reading a very exciting story in which all the monetary gold of the world was brought together in one place and buried. The distressing part of the story was that when a committee of financiers finally investigated, they found the money had disappeared, and this caused them great worry because they did not dare tell the world.

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a laxative

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- ✓ Thorough action
- ✓ Gentle action

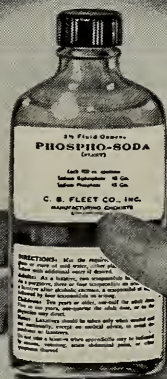
### SIDE EFFECTS

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- ✓ Absence of Constipation Rebound
- ✓ No Development of Tolerance
- ✓ Safe from Excessive Dehydration
- ✓ No Disturbance of Absorption of Nutritive Elements
- ✓ Causes no Pelvic Congestion
- ✓ No Patient Discomfort
- ✓ Nonhabituating
- ✓ Free from Cumulative Effects

### ADMINISTRATION

- ✓ Flexible Dosage
- ✓ Uniform Potency
- ✓ Pleasant Taste

## Judicious Laxation

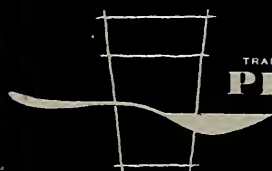


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# Cancer Comment

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## CONFERENCE ON CANCER DETECTION

A Conference on Cancer Detection, sponsored by the American Cancer Society, was held at the Hotel Wentworth, Portsmouth, New Hampshire, on September 9, 10, 11, 1949. By invitation of the Cancer Society, more than sixty delegates were in attendance from the following states and the District of Columbia: California, Connecticut, Delaware, District of Columbia, Florida, Illinois, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Texas, Virginia and Washington.

The purpose of the conference was to discuss various medical examination techniques and their application to the largest possible number of persons with the facilities available throughout the country. Many different examination plans have been tried. Several representative plans and their results were discussed. The Hillsdale Plan was described and received enthusiastic endorsement as a practical answer to the examination of large numbers of people.

The discussions brought out the fact that the large majority of physicians were opposed to the organized cancer detection center plan of operation. Principal objections were the lack of time to give to the Center's work, incompleteness of the examination, the excessive cost and the limited capacity of the center which prevented all but a very few from being examined. Speaker after speaker emphasized these objections. It was pointed out that it would require 195,000 physicians working full time to examine everybody in the United States semiannually.

It was agreed that there was a place for a detection center in medical teaching institutions for instruction of medical students and graduate physicians in adequate medical examination procedures in physical diagnosis. In such centers, a complete examination should be carried out using all facilities and aids necessary to examine every physiological system. Such examinations would require a minimum of one hour to complete. Relatively few such examinations would be made but, by virtue of their thoroughness, their records would provide information for statistical analyses of much

value. Only asymptomatic persons should be examined in such centers.

It was the consensus of the Conference that all other cancer detection examinations should be done in the physician's office. These examinations would not be as complete as those just described but would be confined to accessible sites as the skin, oral cavity, breast, pelvis, rectum, prostate and lymph node areas in which sites the large majority of cancers are found. Such examinations could be further concentrated on specific age or sex groups and on fewer sites. Such examinations would require from 12 to 30 minutes each, depending on the body areas included.

It was emphasized that in connection with the shorter examination, all suggestive leads to cancer elsewhere should be explored until cancer was proved or disproved.

All delegates agreed that the greatest value of cancer detection centers had been that of lay and professional education as to the possibility of finding early cancer by such procedures.

It was pointed out that more attention to cancer was being demanded of physicians than the disease warranted. In the average medical practice cancer was a minor item, and to demand greatly increased amounts of the physician's time would require him to slight other and equally important elements of his regular practice.

At the conclusion of the Conference the following principles relative to cancer detection examinations were adopted:

1. The Detection Center was developed for the periodic examination of apparently well persons. This examination involves medical diagnosis and has useful potentials in the direction of noncancerous as well as cancerous conditions.

2. Experience has disclosed the fact that Detection Center examinations on all citizens are not practicable.

3. At the same time, it is recognized that a large section of the population does visit a physician at least annually. If such physicians will perform office physical examinations of all patients, it is reasonable to expect that most accessible cancers in such persons will be diagnosed at a much earlier stage than in the past with corresponding increased probability of cure. Further, it is desirable that every possible effort be made to provide examinations for cancer to those requesting same. In brief, it is suggested that *every* physician's office or clinic become a "Cancer Detection Center."

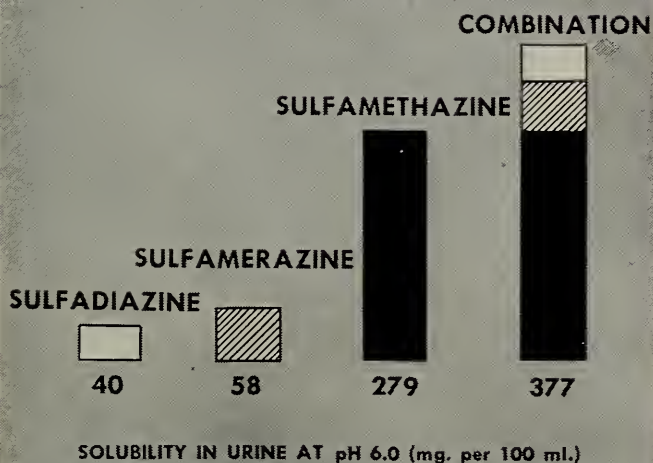
4. In order to demonstrate the value of periodic exam-

*(Continued on Page 1336)*

# INCREASED MARGIN OF SAFETY — A NEW IMPROVED TRIPLE-SULFA COMBINATION

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Sulfamethazine "... can be considered to be a real advance, more especially as its therapeutic activity is of the same order as the parent compound, sulphadiazine."<sup>1</sup>

<sup>1</sup> Whitby, L.: Practitioner 155: 264 (1945).



**FEATURES** • *Low toxicity*—reduced danger of crystalluria • *Potency*—intensive dosages feasible • *Simplicity and convenience*—reduced need for adjuvant alkali or fluid administration • *Prolonged action*—because of sustained blood levels • *Rapid effect*—components of the mixture pass quickly into tissue fluids.

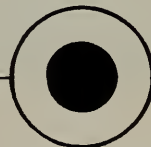
**Available in three convenient dosage forms:** *Tablets:* 0.166 Gm. each sulfonamide per 0.5-Gm. tablet. *Palatabs\* (Half Strength):* 0.083 Gm. each sulfonamide per 0.25-Gm. peppermint-flavored *Palatab*. *Suspension with Sodium Lactate:* 1 Gm. each sulfonamide (microcrystalline) per fluidounce with 3 Gm. sodium lactate; in stable, agreeably flavored vehicle.

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# Michigan Health Council Presents Membership Certificates

At a membership dinner of the Michigan Health Council held in the Tropical Room at the Detroit-Leland Hotel, October 5, membership certificates were presented to sixteen statewide organizations which have joined the Michigan Health Council to date.

Certificates were presented by A. S. Brunk, M.D., Detroit, president of the Michigan Health Council, who formally welcomed the new members and invited their full participation in the expanded activities program of the Council.

Starting with four original sponsoring members, Michigan State Medical Society, Michigan Medical Service, Michigan Hospital Service and Michigan Hospital Association, the following organizations have now taken out membership in the Michigan Health Council: Michigan Education Association, Michigan Health Officers Association, Michigan Public Health Association, Michigan Farm Bureau, American Cancer Society, Michigan Division, W. K. Kellogg Foundation, Michigan Rural Teachers Association, Michigan State Grange, Michigan Agricultural Conference, Michigan Home Economics Association, Michigan Tuberculosis Association and the Michigan Foundation for Medical and Health Education, Inc.

Also recognized were ten community Health Councils which have become affiliated as Associate Members of the Michigan Health Council. These are: Genesee County Health Association, Kalamazoo Health Council, Isabella County Health Council, Metropolitan Detroit Health Council, Wayne County Board of Health, Kent County Department of Social Welfare, Marshall School Health Council, Tuberculosis and Health Society of Wayne County, Manistee Council of Social Agencies and the Charlevoix County Health Council.

Four additional communities are in the process of organizing Community Health Councils with the help of the Michigan Health Council, Mr. Gene Wiard, Executive Secretary of the Council, reported to the meeting. Other speakers at the meeting were E. I. Carr, M.D., Lansing, President of the Michigan Foundation for Medical and Health Education, Inc., and Hugh W. Brenneman, secretary of the Michigan Health Council.

Dr. Carr spoke as chairman of the Michigan Rural Health Conference and cited the plans for



MICHIGAN HEALTH COUNCIL

A. S. Brunk, M.D., Detroit, President of the Michigan Health Council (right), presents the Health Council's membership certificate to the Michigan State Medical Society with C. E. Umphrey, M.D., Detroit, MSMS President-Elect (center), receiving the scroll.

A similar certificate was presented to the Michigan Foundation for Medical and Health Education, Inc., with E. I. Carr, M.D., Lansing, its President (left), being recipient.

the October 28 and 29 meeting in Grand Rapids, and explained the extensive work the Michigan Health Council has done in planning the conference.

Mr. Brenneman pointed to the progress made to date on the Council's two major projects, the organization of Community Health Councils and membership enrollment. He explained that the Council plans to continue both of these activities aggressively.

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## CONFERENCE ON CANCER DETECTION

*(Continued from Page 1334)*

ination of adults without signs or symptoms of cancer it is suggested that appropriate agencies continue to support detection examinations for eligible cases. Such demonstration centers could also serve as sources of information on the true incidence of early cancer, and as areas of investigation for improved diagnostic methods.

5. The competent screening of large numbers of persons for cancer (as distinguished from regular or usual complete medical examinations) deserves further trial as a possible approach to Cancer Control.

For mixed infections



*Chronic, infected, cutaneous ulcers* of hypostatic, decubital or diabetic origin, usually respond rapidly to topical Furacin therapy. Of 81 such cases specifically mentioned in the literature, good results were obtained in 65. The infection, odor and discharge usually diminished promptly without delay of healing. Furacin® brand of nitrofurazone, is available as Furacin Solution (N.N.R.) and Furacin Soluble Dressing (N.N.R.) containing Furacin 0.2%. These preparations are indicated for topical application *in the prophylaxis or treatment of infections of wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. Literature on request.*

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Downing, J. et al.: J. A. M. A. 133:299, 1947 • Johnson, H.: Arch. Dermat. & Syph. 57:348, 1948 • Miller, J. et al.: New York State J. Med. 47:2316, 1947 • Miller, R. et al.: North Carolina M. J. 9:574, 1948 • Shipley, E. et al., Surg., Gynec. & Obst. 84:366, 1947.





# PR In Practice

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## Editorial Bouquets To:

National Recognition of Medical Society leadership was evidenced at the 1949 National Medical Public Relations Conference when C. Allen Payne, District CAP leader and 1948-1949 chairman of the Advisory Committee to the Woman's Auxiliary MSMS, appeared as one of the main speakers on the subject, "Full Utilization of the Woman's Auxiliary as a Public Relations Force." The Woman's Auxiliary MSMS has been cited as having the finest program in the country in its Public Relations aspects . . . Mrs. Fred Kidner, Detroit, was instrumental in having more than 250 wires and letters sent to Washington recently . . . It is reported by H. L. Nigg, M.D., prominent Caro doctor that more than fifty wires were sent from his community . . . H. W. Wiley, M.D., Lansing, has joined R. S. Breakey, M.D., also Lansing, in working towards the completion of the sex education series for use in Michigan's schools . . . Deckerville's J. F. Beer, M.D., is one of the leading CAP workers in the State—has more than 300 names to date on his "list of 20" . . . Wayne County Auxiliary under inspiration of Mrs. Charles Barone, President, and Mrs. E. C. Texter, CAP leader, has just sent a record of nearly 600 new contacts to the state office . . . Fred J. Cady, M.D., CAP leader for the active Saginaw County Society, recently reported securing twenty-eight resolutions from non-medical Organizations in his Area . . . W. H. Huron, M.D., Iron Mountain, indicates a sincere response from letters forwarded to Michigan legislators in Washington . . . Mrs. R. E. Kalmbach of the Lansing Auxiliary stands out as the individual who spearheaded the securing of resolutions from women's organizations in and around Lansing—She had secured thirty-three resolutions at last report . . . Past-President E. F. Sladek, M.D., Traverse City, has interested the MSMS in a Committee of the State Legislature which is making a study of living conditions among migrant workers . . . The Third Annual Michigan Rural Health Conference on October 28-29 promoted better health for rural areas through the combined yeoman efforts of laity and medical

profession—among the latter being E. I. Carr, M.D., Lansing, General Chairman; H. B. Zemmer, M.D., Lapeer, Advisor; Otto K. Engelke, M.D., Ann Arbor; J. R. Rodger, M.D., Bellaire; L. J. Hirschman, M.D., Detroit, and J. S. DeTar, M.D., Milan. Mrs. Gordon Yeo, Big Rapids, active auxiliarite, is busy contacting groups in her area while Mrs. Lorenzo Nelson, Baldwin, is hard at work distributing thousands of pieces of literature . . . Leo F. Chess, M.D., Reed City, is to be commended for his recent letter to the editor in his area in which he effectively defended the medical profession against an attack made in a national magazine . . . As has been stated in the past, there are many more of you who are distinguishing yourselves and the profession through your work in the CAP program. We shall be most happy to acknowledge your work in this column if a report of accomplishments is sent to THE JOURNAL office.

L. W. HULL, M.D., *Chairman,*  
*Special Committee on Education*

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On October 6, 1949, the FBI moved into the Lansing offices of the Michigan State Medical Society and demanded the minutes of all of its Council meetings for the past fifteen years. The FBI is making an anti-trust probe of the medical organization. Earlier, they had demanded the records of Michigan Medical Service, which is the Blue Shield in Michigan—a plan sponsored by the doctors of the Michigan State Medical Society—and also had demanded the records of the Wayne County Medical Society. The FBI has launched investigations of various medical groups throughout the country. We are convinced that these are not bona fide anti-trust investigations but are for the purpose of bringing discredit upon the profession. Ridiculously enough, an article appeared in the *Detroit Free Press* on Sunday, October 9, 1949. Some "wag" suggested that the Treasury Department investigate Fort Knox, Kentucky, and see if there is actually 12½ thousand tons of gold stored there, or to put it in money, \$24,603,587,934.57. There is just as much sense to this investigation as there is to the anti-trust status of our State Medical Societies.



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...She depends on your help for a speedy return to gainful occupation. Women seeking employment who are nervous, apprehensive and generally distressed by symptoms of the climacteric, may find it difficult to meet competition. "Premarin" offers a solution. Many thousand physicians prescribe this naturally-occurring, oral estrogen because...

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# Statement re FBI Investigation

By O. O. Beck, M.D., Birmingham  
Chairman, The Council MSMS

The Michigan State Medical Society was contacted on October 6, 1949, by a representative of the Federal Bureau of Investigation with a request to review the records of the Society. Full access was given to all the minutes and records.

Otto O. Beck, M.D., Birmingham, Chairman of the Council, Michigan State Medical Society, made the following statement:

"We are at a loss to understand the reason for this investigation. We have no knowledge as to who made a complaint or why it was made. If this investigation is part of an effort to incriminate the medical profession in the minds of the people simply by accusation, we decry the methods used as unAmerican and unfair.

"It is well known that the medical profession in Michigan has urged forward the movement to provide voluntary health insurance for the people. We sponsored the Blue Shield plan and have urged all persons to obtain some type of hospital and medical insurance coverage whether it be through the Blue Cross-Blue Shield plan or through reliable insurance companies or from various fraternal, labor and industrial organization plans.

"On the other hand, it is equally well known that the Michigan State Medical Society strongly opposes the movement towards socialization in the United States, particularly as evidenced in the efforts of some governmental agencies to foist upon the American people a system of Compulsory Health Insurance.

"From the literature and minutes of the Michigan State Medical Society, it is a very simple task to prove that the Society has urged consistently that all persons obtain voluntary health insurance; the Society has never at any time acted in any fashion to decry other reputable pre-paid health insurance plans or to keep any person or group from joining plans other than Blue Cross or Blue Shield.

"The Medical Society is a purely voluntary organization. It exercises no coercion on its members other than to maintain high standards of ethics. It continually urges upon its members an increasing number of public services and projects which will maintain freedom of competition, higher standards of medical care, better health for the American people and the maintenance of the American way of life. That is what we are. That is what our Michigan State Medical Society will continue to be."

## A SNEAKY WASHINGTON EFFORT TO BULLDOZE MICHIGAN DOCTORS

The federal government's employment of the department of justice to THREATEN MICHIGAN PHYSICIANS and their medical insurance plans, is unedifying.

It looks very much like a cheap, dirty attempt at political bulldozing.

And if it is what it appears, the blame lies not only with the justice department but with President Truman and his pet "welfare state" adviser, Oscar Ewing.

We understand the willingness of the doctors of Michigan and of the American Medical Association to

open their books and records to FBI investigators. They know they are VICTIMS of a typical Washington smear campaign that they are violating the antitrust laws.

Doctors though, as a rule, are naïve in political matters. They are saying in effect that they have nothing to conceal.

We wish in this instance they had been a little tougher, a little less gentlemanly and co-operative.

We wish they had told the FBI to go to court if they wanted access to any records. That might have forced the issue into an immediate public hearing which, in turn, probably would have embarrassed Ewing and the other welfare state connivers.

\* \* \*

After watching the Blue Shield plan (and its older brother, the Blue Cross) for a decade, we have seen nothing that smacked of interference with any other health insurance plan, and there are a number of competitors in business in Michigan.

In fact, until the department of justice said it had allegations of trust violation, none had ever heard such a charge leveled at Blue Shield. The circumstance that the justice department has declined, so far, to say what the charges are may be of significance.

A good many doctors are saying that they don't think the department really has any such charges, and that the whole thing is staged simply as a trumped up excuse to throw mud on those doctors who oppose Washington's plans for socialized medicine.

The justice department, of course, denies this. We hope that the justice department is not stooping to any such cheap political conniving.

For if this is a political stratagem instigated by the social planners, it is the dirtiest sort of meanness.

On the evidence so far it is hard to avoid the suspicion that that is what is happening. It is suspicious that the investigation is begun when the country is involved in debating the question. It is curious that the investigation happens at a time so appropriate from the standpoint of the social planners.

It is a coincidence, to say the least, that the investigation should strike at 16 groups in various parts of the country, all at once, and all of them medical societies.

\* \* \*

So as we see it, the department of justice may be putting the physicians to test, but also putting the department of justice to test, too.

If the inquiry comes up with any proof of violation of the law, then the violators will be dealt with.

But if, as the doctors say, no violation exists, what then?

Will the department of justice, in that case, promptly say so?

(Continued on Page 1363)



# from *head* to *toe*

CEREVIM-fed children showed greater clinical improvement, in the following nutrition-influenced categories, than children fed on ordinary unfortified cereal or no cereal at all:<sup>1</sup>

- hair lustre
- recession of corneal invasion
- retardation of cavities
- condition of gums
- condition of teeth
- skin color
- skeletal maturity
- skeletal mineralization
- \*blood plasma vitamin A increase
- \*blood plasma vitamin C increase
- subcutaneous tissues
- dermatologic state
- urinary riboflavin output
- musculature
- plantar contact

*Here's why:* CEREVIM is not just a cereal.

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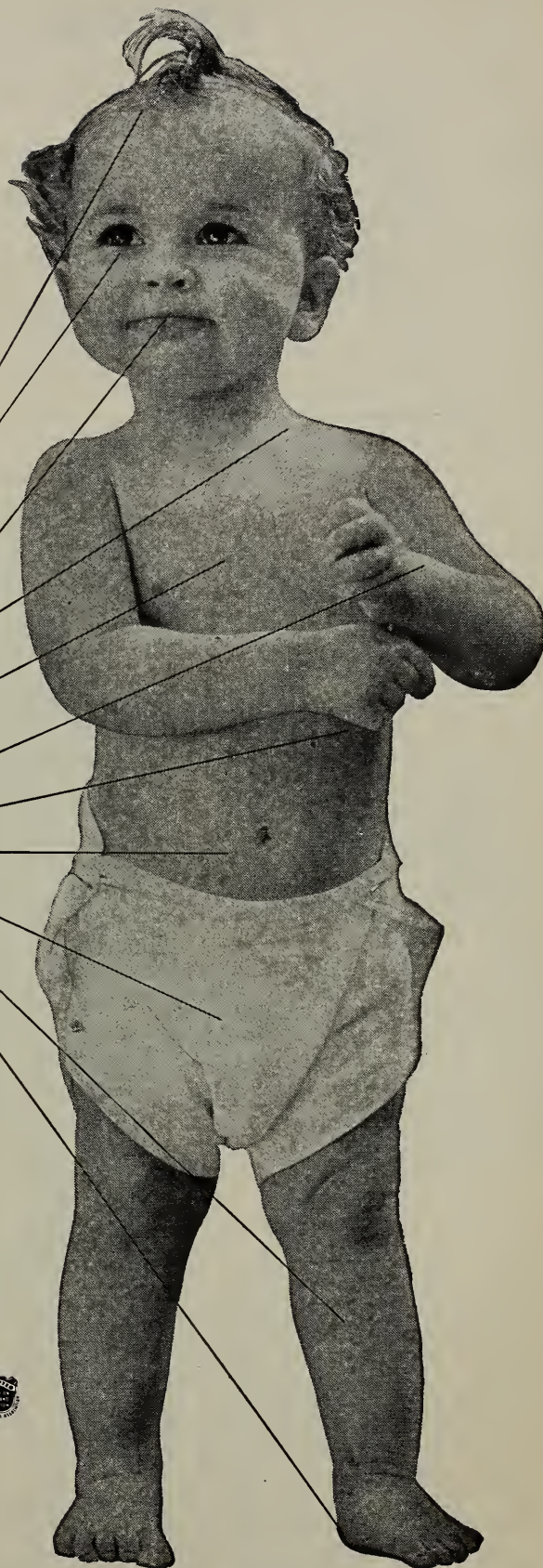
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# Editorial Comment

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## DOCTOR WILKINSON APPOINTED TO NEW YORK UNIVERSITY

Dr. Charles F. Wilkinson, Jr., associate director of the Kellogg Foundation's Division of Medicine and assistant professor of medicine at the University of Michigan Medical School, Ann Arbor, has been appointed professor and chairman of the department of medicine at the Postgraduate Medical School, New York University-Bellevue Medical Center. Dr. Wilkinson will be director, Fourth Medical Division, Bellevue Hospital, and also director of the department of medicine at University Hospital.

Dr. Wilkinson acted as co-ordinator of graduate medical education at the University of Michigan Medical School, Ann Arbor, from 1946 to 1948. With the Kellogg Foundation he was in charge of the development of programs to improve instruction for physicians in rural, nonteaching hospitals. Dr. Wilkinson served in the Medical Corps of the U. S. Army from 1940 to 1946 and was awarded the Bronze Star Medal. He has served as assistant professor of internal medicine at the University of Michigan Medical School and research fellow at University Hospital, Ann Arbor. He took his internship and residency at the same hospital following graduation from Emory University School of Medicine, Atlanta, in 1937—*The Journal AMA*, Sept. 24, 1949.

## OUR FIRST ROUND

Mr. Ewing and his fellow travelers in the Federal Security Administration in Washington have no more sincerity about the health of the American people than Bismarck did when he fostered compulsory health insurance on the people of Germany in 1889. It is a matter of record now that in 1934 Rex Tugwell informed the late President Roosevelt that "there is a small group of people in this country numbering about 150,000 who enter the homes during the year of practically every inhabitant in the nation, and if a way could be devised to control this small group, the entire population could be controlled, and that small group is the medical profession." For some reason or other, the plan did not make much headway until a few months after Mr. Truman became president. If the present actions of the American Medical Association are considered lobbying in Washington, then there are no rules and regulations necessary to control lobbying. No one is being bribed for his vote, and large sums of money are not being spent in wining and dining our legislators to vote for us. The doctors who have appeared in Washington to oppose this legislation are private citizens who have paid their own way to the Nation's capital to interview

their own representatives in Congress. And the members of Congress are to be complimented for listening to their sound judgment.—From *Arizona Medicine*, September, 1949.

## MORAL ISSUES

There is a tendency in modern thinking not only to decry what we consider individualism as being antisocial but also to speak of man as a victim rather than a mold of his own fate. In speaking of major influences in modern thought, Freudianism and Marxism, Professor Joseph Wood Krutch of Columbia University writes, "The two great prophets of the nineteenth century, so often regarded as opposed to one another, have in common at least the very important fact that both, whether or not they intended anything of the sort, have often been assumed to be assuring us that no man can be charged with responsibility for what he is."

\* \* \*

The medical profession in our country as an influential and indispensable social group must face the reality of their present position. They have other social responsibilities than those of the sick room. Today calls for a continuing emphasis of the recognized inherent values and ideals of American medicine. This should be done in medical schools, medical societies, and other professional groups to the end that the public will realize what these things mean to their own welfare and protection. The worth of a doctor is not in man-hours.—Editorial, *Connecticut State Medical Journal*, September, 1949.

## WHOSE OX IS GORED

We read with somewhat mixed feelings that the slightly acidulous look on Sir Stafford Cripps' face is due to a digestive complaint and not an ideological preference for the austerities of Socialism. While extending Sir Stafford our sincere sympathy, we must view his departure on advice of his physicians to undergo special treatment in Switzerland as a sad blow to the prestige of the British Health Plan.

For more than a year now we have been taught to believe that British socialized medicine was all-inclusive, cradle-to-the-grave, womb-to-the-tomb. We have been told that it covered rich and poor, everything from treatments for a simple cold to appendectomies, one to a customer. We have heard that it provides any and everybody with all the outward props that ingenious man has devised to bolster for a little time his inevitably disintegrating body. False teeth-dentures—upper and lower,

(Continued on Page 1344)



THROAT SPECIALISTS REPORT ON 30-DAY TEST  
OF CAMEL SMOKERS —

"Not one single case of throat  
irritation *due to smoking* **CAMELS!**"



YES, these were the findings in a total of 2,470 weekly examinations of hundreds of men and women from coast-to-coast who smoked only Camels for 30 consecutive days! And the smokers in this test averaged one to two packages of Camels a day!



According to a Nationwide survey:

**MORE DOCTORS  
SMOKE CAMELS**  
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Doctors smoke for pleasure, too! When three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!

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# Presidential Address

By H. Corwin Hinshaw, M.D.  
President, American Trudeau Society  
San Francisco, California

WE ARE AMONG the thousands of workers whose prime objective is the control of tuberculosis. We know a logical method of attaining that objective; in fact, there is but one method. We have in our hands the implements with which to carry out that method. The method consists of finding and persuading each person with tuberculosis to seek medical care and to provide his physician with the necessary knowledge to treat the disease effectively; restoring the individual, and protecting others from contagion.

This task involves the acquisition of new knowledge—research—and the distribution of existing knowledge—education. Education involves the public and the medical profession. The doctor in his office, his hospital, his public clinic, is impotent unless the patient comes to him. The patient is in jeopardy unless he knows that he is a patient, and unless the doctor knows how to treat him. These principles are inseparable and his logic is incontestable.

As a physician, and as president of the medical section of the National Tuberculosis Association, I am most interested in the doctor's job. But I am mindful of his utter dependence upon the health educator, his inseparable ally in the campaign against tuberculosis.

I should like to speak frankly of some ways in which we may have been retarding the progress of tuberculosis control. Most dangerous is our emphasis upon our accomplishments rather than emphasis upon our unfulfilled tasks. We have been boasting to the world of our great strides toward eradication of the disease and are beginning to believe our own propaganda. That situation is becoming dangerous, and we should face the facts.

Let us forget all about progressive reduction in tuberculosis mortality statistics for a moment and look at the present situation. Tuberculosis, today in the United States, remains the most important chronic fatal disease to be caused by a "germ,"

the most important infectious disease, the most important of all diseases of young people, the most important of the truly preventable diseases—need I say more?

But there is more to be said—much more! Our mortality statistics list tuberculosis in comparison with groups of other diseases. "Heart disease" is not a disease but a dozen or more of different cause and different significance; arteriosclerotic heart disease of the aged, rheumatic heart disease of the young, hypertensive heart disease of middle and later life, infectious diseases of the heart, like bacterial endocarditis and many rarer conditions. These are all grouped together to be compared with tuberculosis.

Cancer is not a disease, nor do the many types of cancer have the same medical or public health problems, but in our mortality tables the various cancerous diseases are grouped together to compare with tuberculosis. Most cancer appears to be a degenerative disease of older age; most deaths from heart disease are from degenerative causes incident to old age. Everyone has to die some day from some cause, and these conditions will and *should* increase as our people live longer and longer lives. We all support with enthusiasm the campaign against heart disease and cancer, some of which is preventable and some of which may occur during productive years.

Tuberculosis is also displaced on the list of causes of death by accident—all types of accidents, in the house or on the highway. This is obviously another unfair comparison. I believe that if mortality tables were arranged in a more logical manner, with diseases grouped properly, tuberculosis would be in a much more prominent position. If listed according to degree of preventability, we would be more alarmed by our present tuberculosis death rate; or if listed according to age groups affected, according to years of potential life lost; or if listed according to actual cost in dollars; or if listed according to sorrow, hardship, frustration, and degradation caused—then we would be less complacent, and our efforts would be intensified.

May I mention also that if causes of death were listed according to organs affected, diseases of the lungs would stand high on the list. Among chronic diseases, tuberculosis, asthma and bronchiectasis stand high; among acute infectious diseases, pneumonia is most important; among sudden causes

Given by Dr. Hinshaw as outgoing president of the American Trudeau Society at the annual meeting, May 3, 1949, in Detroit, Michigan.

of death, pulmonary embolism is near the head of the list; and among malignant diseases, cancer of the lung is one of the commonest in the male sex.

Sometimes I hear strangely childish concepts of the doctor's role in treatment of disease. We have talked so much about scientific medicine that some people have come to think of the doctor as a technician who subjects his patients to a series of specific tests and grinds out a diagnosis. Then he applies the appropriate remedy and restores the person to health, or admits that medical science has not yet conquered the malady.

We speak so glibly of medicine as a science that some have come to think of medical practice as a technological pursuit—applying fixed formulas to compute the diagnosis. Some believe that there usually are rules and regulations applying to the cure or relief of each condition diagnosed. That kind of medicine is easy, but it is the smallest segment of medical practice.

Patients are people; they have intellect, they have imagination, they have emotions—they have souls. No two normal people react to the same disease in the same way, and few human miseries are caused entirely by pathologic alterations of body structure.

Symptoms are almost always caused by a blend of a pathologic condition with fear, apprehension, and perhaps fatigue. Indeed, more than half of all persons seeking medical advice have no significant organic disease, no detectable alteration of body structure. Their symptoms are due to misbehaving organs, not diseased organs. We call these complaints "functional" as distinguished from "organic" or structural defects. But functional complaints are very real, not imaginary, and they often are curable; nor does the relief usually involve any extensive psychiatric treatment.

And when organic disease strikes—tuberculosis, heart disease, cancer—the emotional aspects, the functional disturbances, are as real, and often more disturbing and confusing to doctor and patient, as are the pathologic alterations of body tissues and organs. Even a major operation is to the normal person frequently more of an emotional experience than it is a physical experience. Medicine is a ministry as well as a science, and the practice of medicine a calling as well as an occupation.

The modern school of medical practice believes in full and complete instruction of the patient. He

not only may but must know the facts, good and bad, and he is not merely the subject of medical treatment—he is the partner of his physician and shares the task of achieving recovery.

Gone are the days of "know it all" bedside manner; gone are the days of incomprehensible Latin prescriptions; gone are the days of mysterious diagnoses. Patients see their x-rays; they know the results and meaning of laboratory tests; they know the diagnoses and something of the future outlook. And doctors no longer hesitate to admit their ignorance of causes of some diseases, or their inability to treat some conditions successfully.

In his mission the physician has many allies. First of all, the patient himself, then the corps of nurses, technicians, hospital workers. And we should mention his dependence upon other physicians of this and previous generations whose duty it is to record their knowledge and experience in medical literature, now an enormous store of information.

The modern physician sees a greater duty than that of restoring people who feel ill to a state of health and self-satisfaction. He feels it his duty to advise normal, well people how to remain well, happy, and productive. He is learning how to examine well people and keep them out of trouble. Through some newer methods of sharp detection of earliest manifestations of incipient disease, he may avert many of the tragedies which occur when his advice is sought belatedly. Through his knowledge of personal hygiene, immunization, nutrition, he may prevent disease. Through his knowledge of the vagaries of the nervous system, he may interpret functional symptoms more accurately now than before.

In the prevention of disease the physician has most powerful allies in public health experts—field workers and executives. These are trained educators; these are inspired and diligent crusaders; these not only work beside the physician—they work ahead of him. They make possible the application of his skills and arts to vast numbers of people otherwise beyond the doctor's reach. Physicians should know more of these professional allies who are in both voluntary and official organizations. Physicians should recognize more clearly the superior knowledge and training which these workers may possess and should use them as consultants in medical problems of social and community significance.



Now I have a good reason for emphasizing the role of the voluntary health crusader and the ministry of the physician, for there are powerful forces on the loose, attacking what they call organized medicine. That term carries a certain hint of derision; nevertheless, I should like to come to the defense of organized medicine, admitting freely its imperfections.

Organized medicine has been organized to elevate the standards of medical practice, to give the people of America better doctors, better drugs, better health, better laws. Its county, state and national organizations have made steady and rapid progress in this direction, and as a result American medicine is today practiced by the highest standards in the world.

The American Trudeau Society, the medical section of the National Tuberculosis Association, might be considered as a part of organized medicine, I think, and can claim some share of the credit for the elevation of standards of practice in diseases of the chest, and some share of the responsibility for existing inadequacies. It seeks to create new knowledge (research) and to make this available to those who treat the sick (medical education). As part of organized medicine, we should work ever more closely with other medical organizations in our field and in other fields. If organized medicine suffers defeat in forthcoming battles, it is my personal opinion that it will be a defeat for voluntary health organizations as well as voluntary medical organizations.

I do not wish to cast any shadow upon existing official local and federal health and medical agencies. They, too, belong to the team. They can do and are doing tasks which private and voluntary groups could never hope to do. But they realize that they derive priceless inspiration and leadership from the voluntary agencies. There are but few men who are skilled in practice of medicine who would destroy our American system to create an omnipotent, devouring government agency. Medical men as a whole believe in applying evolutionary methods, not revolutionary methods, in attempts to improve medical care.

I believe that we are now on the right track to achieve the tremendously great remaining task: the control of tuberculosis—and we should not forget that it is a big task. We have vastly more effective methods of detecting and treating tuber-

## Tuberculosis Control

### *Responsibility of the Michigan Department of Health*

By John A. Cowan, M.D., M.S.P.H.  
Lansing, Michigan

AT THE VERY heart of the Tuberculosis Control Program is awareness by the citizens of Michigan that the control of this dangerous communicable disease is a proper responsibility of the state as a whole. Michigan led the nation in providing prompt hospital care at state expense for every case of tuberculosis found within her borders. The Michigan statute has long been a model for sound, far-sighted health legislation.

In unmistakable language, the law establishes the policy that "expenditures of public funds for the treatment or control of tuberculosis or for the treatment, isolation or control of persons afflicted with tuberculosis, shall be considered expenditures for the protection of the public health, and not as moneys advanced in the nature of welfare or relief." It becomes the clear responsibility of the Michigan Department of Health to establish a basic pattern for the administration of tuberculosis control, reflecting the policy established by statute, and interpreting it in Department of Health regulations.

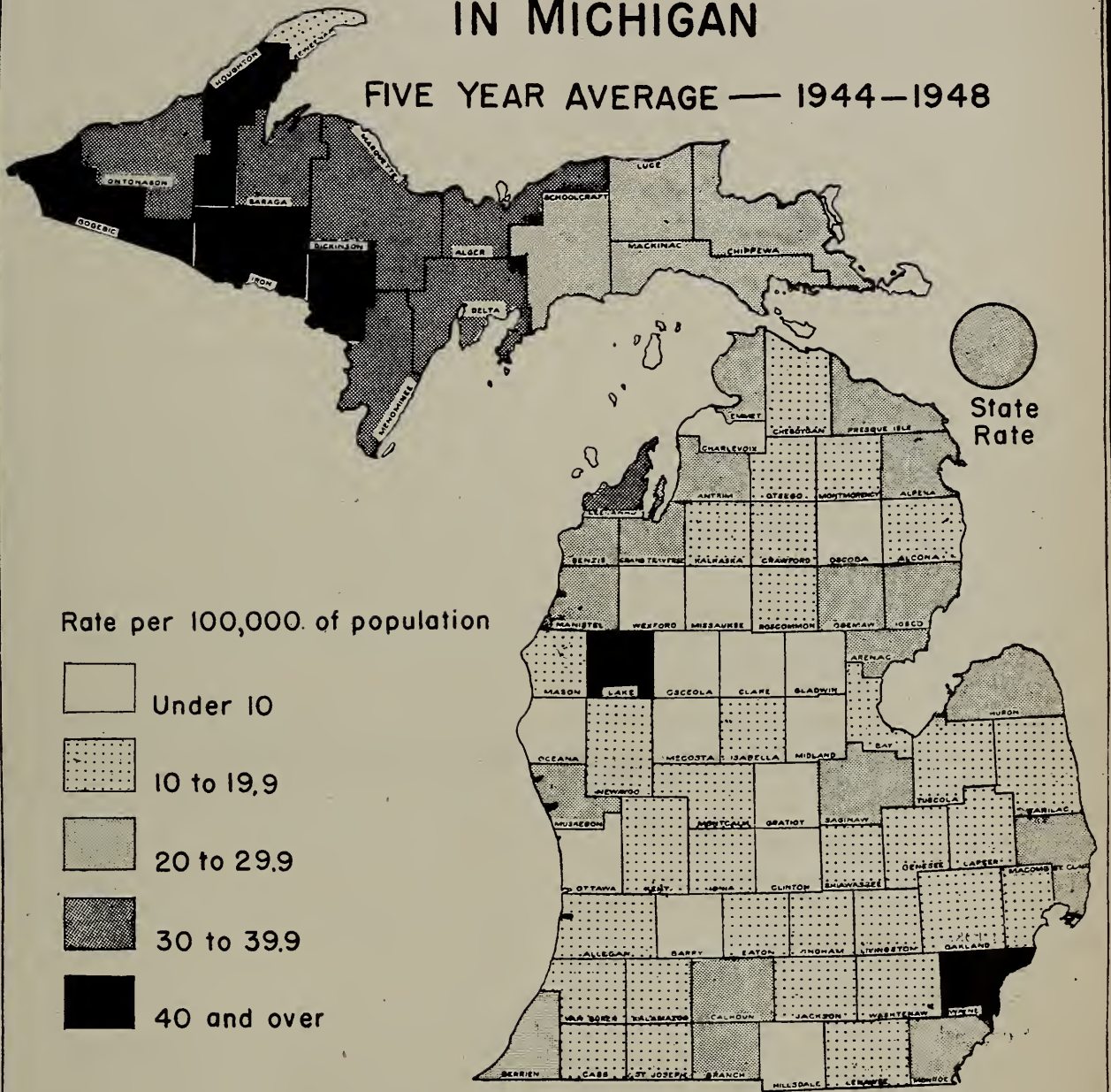
Obviously the provision of hospital care and treatment for persons suffering with tuberculosis is of major importance to the control of the disease. Essentially this is a county function. Through the years, however, a pattern of sharing the costs of hospitalization by county and state on a fifty-fifty basis has been established. During the past seven years the state has gradually assumed an even greater responsibility by paying the full cost of care for: (1) the entire case-load beyond a certain level in each county having a high hospitalized case-load in relation to tax income, (2) all honorably discharged veterans of the military services of the United States not eligible for care through the Veterans Administration, (3) persons living in Michigan who have not established a legal residence in some county in the state, (4) persons contracting tuberculosis during their period of

Dr. Cowan is Director Division of Tuberculosis and Venereal Disease Control, Michigan Department of Health, Lansing, Michigan.

*(Continued on Page 1373)*

# DEATH RATE FROM TUBERCULOSIS IN MICHIGAN

## FIVE YEAR AVERAGE — 1944-1948



MICHIGAN DEPARTMENT OF HEALTH  
Tuberculosis Control Section

employment in the actual care of patients in any Michigan state hospital or institution.

The total state appropriation for this subsidy for the fiscal year ending June 30, 1950, is \$5,869,000. The distribution of this subsidy to coun-

ties and to tuberculosis hospitals is a major function of the Department. This does not include funds appropriated for the care of patients in three state-owned tuberculosis hospitals, for which \$1,634,870 has been appropriated by the state for the



same period. A part of the State Health Department's responsibility in the distribution of state subsidies to counties is the setting up of minimum standards governing the operation of tuberculosis sanatoria. The Michigan Department of Health has taken an active part in evaluating the need for additional hospital beds (726 beds are now provided by the state in the three tuberculosis sanatoria and the University of Michigan Hospital). Construction of a fourth state-owned tuberculosis sanatorium in the Upper Peninsula is about to begin. Recommendations by the Tuberculosis Sanatorium Commission, the Michigan Sanatorium Association, the Michigan Tuberculosis Association, and the Michigan Department of Health also include a new sanatorium in southwestern Michigan and a fifty-bed addition to the present state sanatorium in Gaylord.

Essentially, the day-to-day operation of the tuberculosis control program is the direct and official responsibility of the health director in county, city, or local district. The provisions for hospital care, necessary post-sanatorium care, examination of contacts, routine follow-ups, routine testing and rehabilitation are local responsibilities. To the end that these provisions are as adequate as possible, the local health director must take the initiative in co-ordinating all available resources in his community. The fact that tuberculosis control is a major function of local health departments is attributable to the support that the local health director receives through strong legislation and adequate funds.

This brings us to a second fundamental responsibility of the Michigan Department of Health for tuberculosis control. This is the responsibility of leadership, of co-ordinating the activities of both official and non-official agencies for the most efficient control program for the state as a whole.

The Commissioner of the Michigan Department of Health serves also as chairman of the commission charged with administration of the state-owned hospitals. It is the responsibility of the State Health Department to conduct state-wide studies and surveys in co-operation with other agencies concerned with regard to proposed legislation and new sanatorium construction. The State Health Department has responsibility for epidemiology in that it receives and analyzes reports on new cases of tuberculosis, deaths due to tuberculosis, and all hospitalized cases.

As an additional case-finding aid, the Department of Health operates five mobile x-ray units, which now screen an average of 300,000 persons a year. During 1948, seventy-four counties in the state took advantage of this service. The need for mass screening of the population, made possible by the development of improved small film, is underscored by the facts that (1) x-ray is the only sure way to detect tuberculosis in its early stages before symptoms which might bring the patient to the attention of the family physician are present, and (2) 85 per cent of patients admitted to tuberculosis sanatoria during 1948 were in the moderately advanced or far advanced stages of the disease, and 48 per cent of the total patients admitted were in the far advanced group.

The promotion of programs in general hospitals for the routine chest x-raying of all admissions has also been carried on by the Department. Through federal grant-in-aid funds for tuberculosis control, photofluorographic units have been placed in twenty-three general hospitals throughout the state.

As the final determination of active tuberculosis rests largely on the demonstration of tubercle bacilli, the operation of the system of state branch laboratories is an important function and responsibility. Tuberculin is furnished at state expense to all practicing physicians and departments of health upon their request.

Other state health department responsibilities, not previously indicated, include: (1) provision of a consultation service to sanatoria and local health departments in the field of medical social service, and (2) evaluation of need and allocation of federal funds to local agencies for tuberculosis control.

A tribute to the effectiveness of teamwork between official and non-official agencies lies in the fact that tuberculosis has moved down to ninth place in the 1948 leading causes of death in Michigan. Tuberculosis remained the seventh leading cause of death in Michigan from 1940 to 1947. The shaded map illustration entitled, "Five-Year Average Death Rates from Tuberculosis in Michigan," furnishes the latest available picture of the location of the tuberculosis control problem.

It is apparent that, as has been true for some time, the areas of high mortality are the Upper Peninsula and Wayne County, including Detroit.

Basic to continuing long-range progress in Michigan's tuberculosis control program are five needed improvements. They are:

1. Better epidemiology. This is believed the most important single need for improvement. It involves the development of better case reporting with the use of improved techniques. Through better case reporting it will be possible to find through the examination of contacts an increasingly large percentage of cases in the early, rather than in the advanced, stages of tuberculosis. Improved case reporting will enable the State Health Department better to discharge its responsibilities, because estimates and recommendations of need for diagnostic and treatment facilities can then be made on a much sounder basis.

In recognition of the prime importance of improving epidemiology, the establishment of a Central Registry is being considered by the Michigan Department of Health. It is anticipated that the Central Registry will bring about far-reaching improvements in the collection and analysis of morbidity data.

2. Provision for additional diagnostic-chest clinics.

3. Studies on the work done by x-ray units supplied to general hospitals indicate that they have not materially improved local screening procedures. This remains as a challenge to local hospital groups to the end that this facility may be utilized to the fullest extent.

4. Provision of additional sanatorium facilities.

5. Development of a program for the control of active tuberculosis in the mental and penal institutions of Michigan. The fact that ninety-one out of 1,561 tuberculosis deaths in 1948 occurred in Michigan mental and penal institutions illustrates the need for adding this new facet to the tuberculosis control program.

Co-operation is and must be the keynote of an effective tuberculosis control program. The Michigan Department of Health serves the people of Michigan as the co-ordinating agency between official and voluntary organizations and a leader in the fight to stamp out this dangerous communicable disease.

## The Chest Hospital

By C. J. Stringer, M.D.  
Lansing, Michigan

**D**URING THE LAST decade accelerated case-finding methods and other additions to the total program for tuberculosis eradication, such as readily available surgical and rehabilitation services, have so radically altered the possible spheres of influence and service for tuberculosis control agencies that an appraisal of certain failures and a re-evaluation of the responsibilities inherent to the job appear warranted.

Diagnosis, treatment and reclamation in tuberculosis are so closely related to the management of other intrathoracic abnormalities that those persons and agencies who have in the past concerned themselves primarily with the problems directly related to tuberculosis control must, if their responsibilities are to be properly discharged, give immediate consideration to a much broader realm of activity.

I believe there can be little argument against the concept that any private, voluntary or public agency or person who requests and receives the co-operation of the people in an x-ray survey program is directly responsible for seeing to it that a proper disposition is made of all abnormal findings of clinical significance, including advice to the patient. All too frequently those of us who are charged with the responsibility of carrying out actual programs of treatment are confronted with the unhappy duty of advising a patient or his family that too much time has been lost and a cancer or lung abscess has become inoperable, or that pulmonary cystic disease or bronchiectasis has become infected with tuberculosis, and the outlook for recovery has become unfavorable. All too frequently we are then advised that the patient would have paid more attention to suggestive symptoms, except for the fact that he had been x-rayed three months, six months or a year previously, and had not received a report and assumed that everything was all right, or had received a report merely to the effect that there was no evidence of tuberculosis and assumed that he would have been advised if there was anything else wrong. All too frequently when the survey films have been obtained for study, it is found that there was early



evidence of the destructive disease which has now progressed beyond hope of repair.

It would appear, therefore, that there is considerable merit in the thesis that the attention of case-finding agencies should be directed toward the problem of obtaining a satisfactory examination on satisfactory diagnostic film, and competent interpretation of said x-ray film, and proper disposition of all cases with abnormal findings. It has been my position that the sponsoring agency must, if severe indictment is to be avoided, assume full responsibility for the proper and successful consummation of this objective.

It would be of little value to improve x-ray survey methods without suggesting a plan with promise of improving other diagnostic procedures and treatment. In this connection consideration has been given to the advisability of extending the role of the local or area sanatorium in the total program.

Now that most sanatoriums have or are becoming hospitals within the strict meaning of the term, new hospitals, more purposefully equipped and planned, are being built nearer to centers of population and nearer to adequate consultation staffs and sources of personnel. The older sanatoriums are in many instances being modernized, equipped and staffed to extend their medical, surgical and educational services to the community.

These hospitals can be so organized as to contribute more adequately to the operation of the total program. The first step should be an effort to secure the good will and co-operation of other interested agencies serving the area in their respective capacities. As the services which the hospital alone can provide become known, health departments, tuberculosis associations, private physicians, industry and others look more and more to such a hospital for consultation, leadership and actual services. This attitude confers on the hospital a responsibility and a field of operation much greater and more extensive than that contemplated under the old concept of a sanatorium functioning purely as a hospitalizing and isolating agency for patients proven to be ill with active tuberculosis.

This new and broader responsibility should be readily admitted by sanatorium boards of trustees, and met as effectively as possible. In order to properly discharge the responsibilities justly expected under such a program, it is apparent that the hospital must be provided with adequate out-

patient, hospitalizing and follow-up facilities.

The out-patient department should serve as the case-finding center with facilities available for continuous x-ray surveys and immediate follow-up studies. The staff should be immediately available to the private physicians in the area for consultation and immediate disposition of each problem so presented. Thus, the office of each practicing physician can and often does become a case-finding center.

In the conduct of any tuberculosis case-finding and treatment program, physicians have uniformly been confronted with diagnostic problems and resulting treatment problems. As we all know, pulmonary infiltrations having a similar appearance, but occurring in different persons, may be due to different causes. In many cases exhaustive study is required to establish a diagnosis.

It is my conviction that many lives can be saved and valuable time and tax dollars conserved if the hospitals responsible for the actual hospitalization of patients with known tuberculosis are also staffed and otherwise equipped and qualified to conduct necessary studies in differential diagnosis and proceed immediately to the indicated program of treatment, whether the diagnosis is tuberculosis or some other intrathoracic pathology and whether the treatment is medical or surgical. As a matter of fact, exploratory thoracotomy and excisional surgery are often necessary before a definite diagnosis can be established. If the program is to be totally adequate, the sanatorium must become a hospital for diseases of the chest and be prepared to offer the services necessary for the proper medical and surgical management of these often similar intrathoracic diseases, including tuberculosis, cancer, pulmonary abscess, bronchiectasis, pulmonary cystic disease, nontuberculous pneumonias and others less common.

If the tuberculous treatment program itself is to be adequately managed, the staff and facilities are already at hand for proper management of other intrathoracic diseases. Patients whose diagnosis is not yet established, and those whose illness is known to be due to causes other than tuberculosis, can easily be hospitalized in different sections of the chest hospital center where a trained nursing and medical staff is immediately available.

Under such a program I am convinced that erroneous diagnoses will be reduced to a minimum, and many long, expensive and unnecessary periods of sanatorium care avoided.

# Role of the Private Physician in Control of Tuberculosis

By Kenneth J. Feeney, M.D.  
Lansing, Michigan

FOR SEVERAL decades, the therapeutics of tuberculosis have been removed from the hands of the internist or practitioner of general medicine. However, these physicians must still, because of their optimal position in the front lines, be constantly alert to the possibility of this disease. They are the ones to whom the patient first comes with his illness, and his symptoms may well be those of early tuberculosis. Thus, he must ever be conscious of this disease. To make the diagnosis in its earliest phases offers a challenge as well as the compensation of seeing his patient eventually return to an active, productive life.

Some of the symptoms most frequently heard in a doctor's office are those that may be the result of early tuberculosis. Fatigue, nervousness, indigestion, and other vague gastrointestinal complaints are so commonly enumerated every day that one is inclined to accept them all as manifestation of a functional disorder, despite the fact that they may represent early pulmonary tuberculosis.

Needless to say, all of these patients deserve a complete history and physical examination. Nevertheless, tuberculosis is such an insidious disease that no physician can deny the existence of it without adequate roentgenologic study. All patients, regardless of their complaints, should have the benefit of a chest x-ray examination. This is particularly true in conditions such as diabetes and pregnancy where a higher incidence of tuberculosis is found. Moreover, the taking of a single roentgenogram may not be enough, and so, with persisting symptoms or a suspicious lesion, the x-ray may need to be repeated. In many communities these films can be obtained at no cost to the patient. Where this service is not available, the problem of obtaining frequent x-rays may be a difficult one. However, with the excellent survey work now being done by the Michigan State Health Department, this may be solved in the future.

Of great concern are those tuberculous lesions which suggest some degree of activity. Here the physician must utilize the other diagnostic tests available. Most valuable of these is the tuberculin

test. Failure to react to the second injection dose of 1 mg. O.T. tuberculin may be taken as evidence of freedom from tuberculous infection.

Sputum examinations, particularly pooled five to seven day specimens, for guinea pig inoculation or for culture, are of inestimable value in determining the activity of a suspicious pulmonary lesion. In recent years the obtaining of a gastric specimen has been widely used for this same purpose. This latter procedure can be done simply in the physician's office, but certain precautions must be observed. The tubing should be thoroughly washed with water and boiled in a sodium bicarbonate solution to prevent contamination between patients. The specimen must be obtained on a fasting stomach as soon after arising as possible, and unfortunately the material must be received by the laboratory within twenty-four hours or the percentage of positives is considerably decreased.

One of the most important fields of usefulness in tuberculosis for the private physician is that of a mediator between the sanatorium personnel and the patient. He may on occasion be asked to enlarge upon or confirm the findings of the phthisiologist. Because of the closeness of the private practitioner to the family unit, he is constantly aware that when tuberculosis strikes it hits human beings. As Hinshaw<sup>1</sup> has recently stated, "Patients are people. They have intellect, imagination, and emotions—they have souls." Therefore, the family physician is in the unique position of being able to offer the reassurance and counsel that is needed, and which will enable the patient to obtain the sanatorium care essential for his recovery.

Finally, after the tuberculous patient is discharged from the sanatorium, the private physician again comes into the picture. After many months of "cure taking" the patient finds himself with well people. He no longer has the companionship of his former associates in the sanatorium who were somewhat "in the same boat," but now he finds himself in the situation of having to continue a gradual rehabilitation among his relatives and friends, who are active wage earners. Whether the patient returns to an active, productive life or becomes a repeater at the sanatorium may well depend upon the constant guidance of the family physician.

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# Tuberculosis Case-Finding in General Hospitals

By Fred J. Hodges, M.D.

Ann Arbor, Michigan

A PHASE OF tuberculosis case-finding which can ill-afford to be overlooked is the photo-fluorographic chest survey of all patients who register for service at general hospitals. As one would expect, the concern regarding the state of their health or the frank symptoms of disease which bring people to hospitals exert a form of selection which provides a higher incidence of x-ray recognizable tuberculosis than that which is encountered when group surveys among supposedly normal individuals are conducted. For example, at the University Hospital of the University of Michigan, the incidence of active tuberculosis, after obviously scarred and calcified lesions have been sorted out, runs 1.28 per cent of all admissions when compared with .5 per cent discovered among supposedly healthy University students at the time of their initial matriculations.

Once the facilities for miniature chest filming have been installed in a general hospital and operation of the surveying venture has been started, it is extremely important to investigate all hospital personnel at the time of initial appointment and subsequently at one year intervals in order to recognize the existence or development of tuberculosis within this very important group. Exposure to tuberculosis through known cases or through patients inadvertently admitted to general hospitals before diagnosis has been established is a very real menace to hospital employees and their interests should be safeguarded.

Within the population of a general hospital, a population which is constantly shifting and which in the course of a year constitutes a very large number of people, tuberculosis case-finding is by no means limited to minimal expressions of the disease. It is not unusual to discover, on the basis of purely presumptive routine surveying, patients in whom the disease has been allowed to become far advanced through lack of prior diagnosis. Such individuals are extremely dangerous to all with whom they come in contact, and this danger is accentuated when they are admitted along with

uninfected individuals to the beds of the hospital where they are tended by physicians, nurses, nurses aides, food handlers and occupational therapists.

The discovery of unsuspected tuberculosis among the patient population of the general hospital represents case-finding under particularly favorable conditions. All such persons have already elected to become patients. It is far easier under such circumstances to obtain the co-operation of the individual and of his family. The door is open for extension of the survey to relatives, friends and known prior contacts. Isolation and treatment can be started without delay. All of the facilities for collateral diagnosis are readily at hand. The all-important step of substantiating miniature chest findings with those obtained on the basis of more extensive x-ray examinations can be carried out with dispatch and without the danger of losing contact with the individual, which often presents a serious problem in surveys conducted among large groups of supposedly normal individuals.

To be successful, routine chest surveying conducted by a general hospital must be pushed with vigor and must continually be subjected to devoted and unrelenting medical supervision. It is by no means impossible to provide such circumstances of operation if adequate physical facilities are provided conveniently near to the point where newly registering patients are first contacted and if the entire venture is made the direct responsibility of the radiological division. The daily reading of miniature chest films is not a seriously time consuming task. To be effective, reporting must be prompt and individuals in whom evidences of pulmonary tuberculosis have been discovered must be isolated without delay while necessary steps are being taken to bring into action private and public control agencies. A hospital which is contemplating the inauguration of a routine surveying plan of this sort will do well to think long and carefully before jeopardizing the long-range effectiveness of the step by demanding the collection of a specific service charge for this form of examination. It is well to consider that the very real measure of protection which is afforded to all hospital employees constitutes a financial saving in the institution, which in a measure removes the necessity for charging the service to paying patients. In casting about for a suitable fee to be attached to this activity, hospital managements are far more apt to set the figure at several times the actual

Professor of Roentgenology, University of Michigan Medical School.

cost rather than to err in the opposite direction. It is unfortunate when the patient public assumes that the fee paid for a miniature chest film, whatever the amount, relieves him from further financial responsibility in the matter of x-ray examination of the chest. As a matter of fact the survey procedure is just what the name implies, a means of determining in advance which patients seriously need more elaborate forms of chest examinations, and these latter, of course, should be borne as a part of the patient's legitimate care. Whenever a definitive fee is attached to admission chest filming, difficulties encountered in realizing full coverage for all patients increases sharply. As a matter of actual experience, the x-ray department in the hospital where such surveying has long been practiced has experienced a measurable increase in the amount of chest filming and fluoroscopy which it does as an adjunct to the survey project.

Hospital admission chest survey, unlike sporadic or occasionally repeated testing of selective groups of the citizenry of a locality, goes on day by day, year by year, as a part of general operation. The long-range results for such case-finding are bound to be beneficial for the city in which the hospital is located as well as the entire area from which it draws patients. If all general hospitals in the state of Michigan were to join in this work, a major portion of the tuberculosis case-finding, which must go on if our state is to maintain its present record in tuberculosis control, would become a matter of routine, assured of consistently continuous rewards in terms of improved public health.

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#### EFFORT TO BULLDOZE MICHIGAN DOCTORS<sup>1</sup> (Continued from Page 1340)

In fairness, it **MUST**.

For to start an investigation of alleged wrongdoing, and then let the whole matter die in silence, is unfair.

*The doctors are entitled, now that they have been accused, either to have proof produced, or to have public exoneration as soon as reasonably can be done.*

\* \* \*

The department of justice must live up to its name and be a department of **JUSTICE**, not an organization devoted to fishing up whatever it can find to the detriment of people who don't happen to believe in the same brand of politics as the administration.

Until the department of justice shows, by a forthright statement of facts, whether it is honestly investigating, or merely trying to pull political chestnuts out of the fire, it is as much on trial as the medical profession.

Indeed, probably more.—*Detroit Times*, October 10, 1949.

## The Tuberculin Test

### The Physician's Most Effective Weapon Against Tuberculosis

By J. Arthur Myers, M.D.

Minneapolis, Minnesota

**P**HYSICIANS EVERYWHERE lament the fact that there is not available a specific test for cancer that will indicate the presence of the disease while lesions are microscopic and cause no symptoms. It is believed that if such a test were available, reactors could be kept under close observation and those parts which malignancy frequents could be examined often, so as to locate the lesions as soon as they are large enough to be found by the usual examination procedures. If this were done, probably the majority of primary malignant lesions would be found and extirpated before metastases occur. Such a specific diagnostic test would permit an almost ideal cancer control program.

Such a test is available for tuberculosis. When tuberculosis develops in the human body; it can be detected by the tuberculin test within three to seven weeks after the invasion of tubercle bacilli occurs. At this time the lesions are usually still microscopic, and no phase of the examination of the living body, including x-ray inspection, is capable of locating them. However, the tuberculin reaction indicates that lesions are present and that they contain living tubercle bacilli. Thus, a tuberculin reaction justifies a definite diagnosis of primary tuberculosis. Persons with this condition are potential cases of reinfection type or clinical disease. Therefore, the parts of the body that clinical lesions frequent should be periodically examined for this detection before they cause symptoms or become contagious. Wherever physicians have done this methodically, they have received dividends far in excess of those ever obtained by any other method.

The development of clinical tuberculosis among tuberculin reactors is largely dependent upon whether exogenous or endogenous reinfections occur. Clinical tuberculosis develops in a sufficient number of tuberculin reactors to make periodic examination of all reactors profitable. Nearly everyone who on first examination is found to have

<sup>1</sup> From the University of Minnesota School of Public Health.



clinical tuberculosis is a tuberculin reactor. The sensitivity of the tissues that results in a tuberculin reaction is present in all such cases before clinical disease develops. Had the sensitivity been detected at that time by the tuberculin test and periodic examinations made thereafter, the lesions would have been found, in most cases, long before symptoms appeared which brought the individual to the physician. This procedure is logical and practical and is the only one at the physician's command for diagnosing primary, as well as clinical, tuberculosis early in the course of development.

The tuberculin test is important in *differential diagnosis*. Tuberculous infection is now far from universal among adults. In fact, there are large areas in the United States where 25 per cent or less of adults react to tuberculin. Even among the aged, one finds numerous nonreactors. Therefore, the tuberculin test is no longer one for children, but is equally valuable among adults. When a lesion, either thoracic or extrathoracic, is suspected of being tuberculous, a characteristic tuberculin reaction alone does not prove that it is tuberculous. However, it indicates that the individual is infected with tubercle bacilli, and therefore the lesion may be tuberculous. On the other hand, if the individual fails to react to tuberculin in sufficient dosage and properly administered, it is excellent proof that the suspected lesion is not tuberculous.

#### Criterion for Institution of Treatment

With the production of new therapeutic agents which definitely suppress the tubercle bacillus in animal and human bodies, it is possible that within a short time one will be found which is germicidal. When such a drug is available, its greatest value will be in attacking tubercle bacilli as soon as possible after they invade the tissues. The developing primary lesions are usually small and vascular, so a drug would be expected to reach the tubercle bacilli promptly after administration. When such a drug is developed, the importance of periodic tuberculin testing of all nonreactors is obvious. As soon as the tissues are found to be sensitized to tuberculin, the drug should be administered just as we now administer antitubercular chemotherapy as soon as possible after positive serology is in evidence. Therefore, the physician should know the tuberculin sensitivity status of every member of his clientele. Moreover, this information should be kept to date by retesting the nonreactors

at least annually, and more often in the event of any known exposure to contagious cases of tuberculosis.

#### Epidemiological Agent

As an epidemiological agent the tuberculin test exceeds by far everything else that has been employed. Finding a tuberculin reaction is locating the trail of a contagious case of tuberculosis. Often this case may be found by examination of the reactor's immediate adult associates. If a child of one year of age reacts to tuberculin, there has most likely been in that child's environment during the year a contagious case of tuberculosis. Likewise, when a person of any subsequent age, even an elderly individual, has been a nonreactor to tuberculin but becomes a reactor within a year after the last test, there has most likely been a contagious case of tuberculosis in that person's environment. Seeking the source of such infections among the reactor's adult associates pays large dividends.

#### Determines Effectiveness of Control Program

Tuberculin testing is the only method by which one can determine accurately the effectiveness of a tuberculosis eradication program. By testing all persons before the program begins, one determines the number of persons who have previously been exposed to contagious cases and hence have primary lesions (tuberculous infections). After the control program has been in progress for five years, testing the children who were born after it began promptly determines whether these children have been better protected against tubercle bacilli than those born during the five-year period preceding the institution of the program.

Repeating the test every five years thereafter affords a much better criterion as to efficaciousness of the program than morbidity or mortality, which often are the result of infections which occurred before the program began.

In many parts of the United States, the incidence of primary tuberculosis (tuberculous infection) has become so low that finding all reactors and examining them periodically is a much more efficacious control measure than attempting to make x-ray inspections of the chests of the total population. Clinical tuberculosis develops only among tuberculin reactors. Therefore, only they need to be periodically examined.

# Mass Chest X-Rays and the Practicing Physician

By Ben R. Van Zwalenburg, M.D.  
Grand Rapids, Michigan

THE PREVENTION of tuberculosis by minimizing public contact with infectious persons begins exactly like the recipe for rabbit stew. "First, catch your rabbit." Miniature chest filming is the process which has recently made that first step economically possible on a broad scale. It consists simply of photographically transferring the image of a fluoroscopic screen to a small film area.

This process has reduced film and labor costs, and since the exposure of the films is a technical one-shot procedure, it is easily put on a production line basis. Therefore the method is adaptable to survey of large groups in a way that ordinary clinical consultation can never be. Examination of groups in which a high incidence of infection is expected and which can be organized and handled in mass has already gained wide application and is being carried out by county, state and federal health departments, by hospitals and by tuberculosis associations.

We have now come, by natural progression, to the threshold of universal application of this method to the unselected general public. The United States Public Health Service already has in progress a program of universal screening x-rays to be carried out in the eighty-odd major cities of the United States, and many other agencies concerned with tuberculosis control are increasing their application of this universal approach. Rapid expansion of miniature film programs is to be expected and should be wholeheartedly supported by the medical profession because it is the most effective tool available for control of tuberculosis exposure.

It is well, then, that we understand the relation of chest screening surveys to us and to our patients. Misunderstanding, ineffectual procedures and lack of teamwork may easily arise through failure of the practicing physicians or surveying agencies to appreciate clearly the inevitable separation of the process into two separate and dissimilar phases. These two phases should not be considered competitive in any sense. One can be supplied effectively only by some form of social agency, the other by the medical profession.

The key to understanding is in the word "screening." The miniature film does not, as a rule, indi-

cate which persons have active tuberculosis. It merely sorts out, at minimum expense, most of those who may have chest abnormality of any sort from those who do not. From 3 to 5 per cent of the surveyed group will be found to present findings of possible importance requiring definitive study. At this point the miniature film survey is completed. But only a small fraction of this 3 to 5 per cent will actually have active, infectious tuberculosis.

The second stage of the work now begins. For study of the small group of possible abnormals, it is necessary to revert to a complete medical workup. History, physical examination, laboratory studies and full-sized, sometimes personalized, radiographic studies are all necessary. In some cases they must be continued over a long period. It is apparent that these second stage procedures are, by their nature, unlike the original filming process in that they are not suitable for regimentation. They must be individualized to fit the type of abnormality suspected (often entirely outside the field of tuberculosis). They require medical training and judgment. They should be carried out by the physician of the patient's choice in order to give the patient the confidence of the personal physician-patient relationship during a very anxious period. Even if the investigation is to be accomplished by referral to a tuberculosis sanatorium, the family doctor's discussion and recommendation can do much to maintain the patient's morale and that of his family. Persuasion by the social service worker and underwriting of the expense are sometimes vitally necessary to completion of the study, but the problem during this phase is primarily a medical diagnostic problem and one of maintaining patient confidence. It deserves the full attention of the attending physician.

A properly carried out chest screening program, therefore, does not replace in any way the physician's efforts. Rather it picks out for him a group of his patients who need special attention. It will leave behind it a professional diagnostic job at least equal, in complexity and expense, to the original job of making the miniature films. And, conversely, the practicing physician's best efforts are essential to the success of the survey because the efficiency of the entire program in terms of number of diagnoses proven will rest unavoidably with the quality of work done in this second stage of definitive diagnosis.

*(Continued on Page 1378)*



# Tuberculosis Among Food-Handlers

By Thomas A. Barton, M.D.  
Howell, Michigan

**M**ASS RADIOGRAPHY of the chest has rapidly become the key weapon in tuberculosis case-finding. This, when and if employed judiciously, can yield excellent results. Food-handlers are a group which provides an excellent opportunity to use this diagnostic agent. They are a public health liability group, which can easily be followed up, and a 100 per cent response can be obtained. A discussion of the problem of tuberculosis among food-handlers will be presented and remedial measures offered.

The definition of a food-handler is, by necessity extremely broad. He or she may be defined as any person employed in any establishment who handles or comes in contact with any food or drink provided for public consumption. At present in the State of Michigan, there is no law requiring periodic x-ray examination of food-handlers, but various units of government have passed local ordinances requiring this.

A case in example is the City of Detroit. Dr. Bruce Douglas, the Health Commissioner, supplied the statistics shown in Table I, compiled since 1946, when the city started systematic x-raying of all food-handlers.

Another case<sup>1</sup> is that of Philadelphia where the first systematic x-raying of food-handlers began April, 1947. These statistics cover only a ten-month period, in which the investigators examined 32,535 food-handlers and found 771 cases in which there was significant evidence of reinfection pulmonary tuberculosis. This represented 2.3 per cent of all cases examined. Of the 771 cases interpreted as tuberculous, 81 per cent were followed up and the diagnosis confirmed in 76 per cent of the cases. Sixty-six active cases, or .25 per cent of all examined, were hospitalized, but follow-up had not been completed at the time of publication on all the cases, so more active cases undoubtedly will be found. Of all food-handlers examined, 55.2 per cent (17,974) were males and 44.8 per cent (14,561) females. They found that there was an increase in prevalence of the disease with

increasing age. This was most prominent among white males, but definite among females. They noted that there was five times more tuberculosis in negro males between fifty-five and sixty-four than in negro females, but at the age of fifteen to twenty-four the prevalence was the same.

The above two cases are illustrative of how the incidence of significant reinfection pulmonary tuberculosis in food-handlers was ascertained in two large metropolitan areas in the United States. It must be realized that it is impossible to secure the incidence of significant reinfection tuberculosis in the general population in the State of Michigan, much less than in the United States, due to the lack of adequate surveys. However, in the fiscal year 1947-1948, the Michigan survey<sup>2</sup> covered 303,663 individuals in the state, and 3,146 cases of significant cases of reinfection tuberculosis were discovered. This represents a figure of 1.03 per cent which may be suggestive of the general incidence in the state but must, by no means, be construed as a true figure.

Where the pre-employment x-ray program has not been used, certain impressions regarding tuberculosis among food-handlers can be formed by determining the incidence of food-handlers among sanatorium admissions. At the State Tuberculosis Sanatorium at Howell, ninety-four food-handlers were admitted over a ten-year period out of 3,102 admissions. This averages 9.4 cases, or 3.03 per cent of yearly admissions. In the fiscal year of 1948-1949, nineteen cases were admitted. These were 6.43 per cent of total admissions (269), consisting of thirteen males and six females. Six of the nineteen were bartenders, five waited on tables, four were cooks, two owned restaurants, and one was a confectioner. The average male age was forty-four, and the female twenty-seven. In order to help explain why male food-handlers are of an older age group, admission statistics of the sanatorium should be examined. An observation of all admissions is that there is a tendency for the disease to involve more males over forty years of age than any other age group of either sex. For example, the number of males over forty has increased from 35.9 per cent of the total admissions at the Michigan State Sanatorium in the fiscal year 1938 to 52 per cent in 1948. In females of the same group there is no change, the number being 20 per cent in 1938 and 20 per cent in 1948.

<sup>1</sup>Staff physician, Michigan State Sanatorium, Howell, Michigan.

TABLE I

	Cases Examined	Per Cent With Evidence of Reinfection Pulmonary Tuberculosis	Active Cases Found	Per Cent of Total	Inactive Cases	Per Cent of Total
1946	27,334	.79	18	.066	199	.728
1947	48,019	1.97	135	.281	815	1.69
1948	36,919	.87	63	.171	260	.704

It may be assumed, from the Sanatorium statistics, that tuberculous food-handlers by and large are generally males, who are in excess of forty years of age, inasmuch as tuberculosis in the population at large is involving more males over forty than ever before. In addition, it may be that these individuals are not physically able to compete on the active labor market, and therefore have to accept such jobs (waiters, bartenders, short order cooks, et cetera) that do not require a high degree of skill nor physical endurance. For a similar reason a large number of food-handlers may be transients.

It must be concluded that even if the incidence of tuberculosis among food-handlers were less than that in the population at large, that in view of the degree of exposure offered the public by them, tuberculosis must be excluded as prerequisite to being a food-handler.

Remedial measures would be as follows:

1. Have local ordinances making systematic chest x-rays of food-handlers mandatory, or better yet have state laws requiring this.

2. Encourage physicians to become acutely aware of the following facts:

(a) That it is their responsibility to refuse to sign health cards permitting food-handlers to work until a chest x-ray has been taken. The point cannot be emphasized too strongly that tuberculosis cannot be excluded by physical examination and history. This applies to far advanced cavernous as well as minimal tuberculosis.

(b) That tuberculous activity frequently cannot be determined with 100 per cent accuracy on a single x-ray. Serial follow-up x-rays, together with sputum and gastric cultures for tubercle bacilli, are necessary in order properly to evaluate many cases.

(c) That tuberculosis is not a disease of young people, but that it is now showing a tendency to becoming a disease of men over forty years of age.

3. Urge all persons with inactive tuberculosis who are working as food-handlers, if at all possible, to

change employment. There are, however, mental reservations regarding their public health liability.

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### RECOMMENDATIONS OF TUBERCULOSIS CONTROL COMMITTEE

The Tuberculosis Control Committee, in view of the repeatedly inadequate use now being made of available x-ray screening facilities, recommends: First, that the Michigan Radiological Society be contacted by the Secretary of the Michigan State Medical Society and asked to survey what use has been made of available hospital fluorographic screening facilities and what means could be suggested to increase this use; second, that the various hospital administrations be contacted by the Council of the MSMS regarding the low use of facilities already present and be questioned regarding possible means of increasing use of available facilities and the possibility of installing such facilities in hospitals not already equipped.

The Tuberculosis Control Committee recommends that the Michigan State Medical Society, the M.T.A., the State Health Department and allied groups continue and further the closer co-ordination toward tuberculosis control, on the state level and also the county level of these societies.

The Tuberculosis Control Committee feels that B.C.G. vaccination is a method of tuberculosis control which can be approved for use only under the carefully controlled conditions of scientific investigation as outlined by the United States Public Health Service and The American Trudeau Society, and then only as a supplement to already existing methods of control.

The Tuberculosis Control Committee emphasizes the report of its 1948 committee relative to the need for discovery of tuberculosis in food handlers. The committee recognizes the necessity for measures to correct present deficiencies. The present Committee requests the Council to instruct the new committee to consider specific measures to accomplish this goal, with emphasis upon recommending an educational program directed toward possible future legislation.—Minutes of Tuberculosis Control Committee, June 12, 1949.



# "Don'ts" in the Clinical Management of Tuberculosis

By John W. Towey, M.D., F.A.C.P.  
Powers, Michigan

THE INTRODUCTION of miniature films, together with subsequent x-raying of large blocs of our population, is presenting new problems to medical practitioners. If the chest x-ray films could be the beginning and the end, i.e., diagnosis, the solution would be relatively simple. Unfortunately, however, x-ray films have their limitations, and we must, therefore, clinically process those persons with suspicious findings if we are to arrive at an exact diagnosis.

Not all parenchymal lung lesions are tuberculous, nor are all tuberculous lesions active. Therefore, they should all be placed in the same category as a breast tumor and considered malignant until proven otherwise. The clinical processing of these patients is not particularly difficult, but it does require physicians to be meticulous in carrying out properly certain fundamental procedures. Usually, it is those things we neglect to do that most often get us and our patient into trouble. In line with that thought, I would like to suggest a few "don'ts" relative to the management of this disease.

Don't ever forget to include tuberculosis as a possibility in the differential diagnosis. Mass x-rays of 170,000 persons in the State of Michigan revealed that 1.5 per cent presented x-ray evidence suspicious of tuberculosis. We can assume that most of these persons x-rayed are healthy individuals. Patients who are ill and therefore consulting their physician most likely would show a higher incidence than the above figure.

For some years, the University Hospital at Ann Arbor has been taking routine chest x-rays on all admissions. Their records reveal that 9 per cent of these x-rays reveal some abnormality in some form or another. These figures stress the importance of obtaining chest x-rays of your patient.

Don't forget the importance of a detailed history. Has your patient been in contact with an open case of tuberculosis? Does his past history include diseases closely allied to tuberculosis, i.e., pleurisy, cervical adenitis, rectal fistula, diabetes, et cetera? Do his present symptoms include un-

usual fatigue, hemoptysis, frequent colds, night sweats, et cetera?

A single chest film can be tricky, and while we must consider the x-ray as a valuable adjunct, still remember that it is only one of the tools in your diagnostic armamentarium. It is important to determine whether your patient has had a previous chest x-ray taken to determine whether the present lesion is a new one or merely an old lesion, and if it is old whether it is changing for the better or worse. All new lesions and all changing lesions should be considered active regardless of symptoms, sputum status, et cetera. Keep in mind that the absence of symptoms does not exclude active tuberculosis.

Don't try to make interpretations from inadequate films. Make sure that your x-ray technician is familiar with the essentials of a good diagnostic film. If there is a question in regards to the proper density, secure a film of good quality and use that as a standard. Proper density in a chest film is all important for good interpretation. Make sure that your patient is properly centered so that you obtain an x-ray picture of the entire chest. Don't permit foreign objects, such as number dials, jewelry, medals, et cetera, to obscure important portions of the film.

Don't minimize the importance of pleural effusions. Don't fail to recognize that a patient with a pleural effusion may also have active parenchymal disease in his lung which may be hidden in the x-ray by the fluid shadow. In these patients it is important to submit fasting gastric contents to the laboratory in order that your diagnosis may be complete.

Don't fail to make tuberculin testing a common procedure in your office practice. A tuberculin reaction is diagnostic of the presence of lesions of the first infection type of tuberculous infection. About 10 per cent of positive reactors eventually develop reinfection type tuberculosis. It is important that these people with primary infection be given routine x-rays at least once a year or sooner if indications should arise.

Don't ever be disillusioned by the fact that your patient's sputum may be negative for acid-fast bacilli by direct smear on one or more occasions. Keep constantly in mind that your patient may have active reinfection type of tuberculosis and still have repeated negative sputum smears.

Fasting gastric contents are the best specimens to determine the absence or presence of tubercle bacillus, providing you have the facilities for processing these by culture and/or guinea pig inoculation after aspiration. Don't mail fasting gastric contents to a distant laboratory and expect reliable reports. The gastric juice has an inhibitory action on the tubercle bacillus, and all fasting gastric contents should be processed within a short period, namely, hours following aspiration.

Don't prescribe streptomycin indiscriminately for your tuberculous patients. Remember that tuberculosis, for the most part, is a chronic disease which often requires surgery in its treatment. Streptomycin has a limited period of usefulness, after which the tubercle bacilli become resistant to the drug.

The use of the drug should be reserved for the most optimum period when it will exert its greatest effect in treatment.

Tuberculosis is a communicable disease. If possible, try to determine the source of your patient's infection, and also emphasize the examination of their immediate contacts.

No patient is ever actually cured of tuberculosis. "Apparently cured" is the highest recognized classification that can be obtained.

In order to avoid reactivation of their tuberculosis these patients should be instructed in regard to the proper care of their disease. The best place for that indoctrination is in any well-conducted tuberculosis sanatorium. Tuberculosis sanatoria were built primarily with one purpose in mind, namely, the isolation of the open infectious cases. Treatment in the home so frequently ends in disaster for the patient, and in addition exposes the other members of the family to their infection.

Tuberculosis is a major health problem, and patients should be cautioned not to pass their infection on to the present and succeeding generations. Not infrequently patients with active tuberculosis assume a selfish attitude as regards the welfare of the public. As physicians, it should be our responsibility to so instruct these patients that they may conduct themselves in accordance with the best interest of themselves and the public good.

MSMS

Phthisiologists have long agreed that the diagnosis of tuberculosis must rest upon the demonstration of tubercle bacilli in tuberculous suspects.—FRANCIS J. WEBER, M.D., *Public Health Reports*, Oct. 1, 1948.

## Laboratory Aids in the Diagnosis and Control of Pulmonary Tuberculosis

By H. E. Cope, M.D.

Lansing, Michigan

THE RAPID EXPANSION of the tuberculosis x-ray screening program has led to increasing utilization of laboratory procedures for the isolation and identification of the tubercle bacillus. Increasing experience has, to a very great degree, crystallized many aspects of our thinking in reference to the efficiency and reliability of the various types of laboratory specimens and techniques available to the physician. Recapitulation and summary of these techniques and of the significance of the results obtained seems in order.

Three distinct types of sputum specimens are available for laboratory examination for pulmonary tuberculosis. The specimen may be a single collection of sputum, a pool of sputa collected over a period of time or sputum swallowed by the patient during the night and aspirated from the stomach before breakfast in the morning. Two different types of examinations are available for examination of these specimens in the laboratories of the Michigan Department of Health. Single specimens are examined only microscopically for the presence of acid-fast bacilli; pools of from five to seven first morning collections of sputa are examined microscopically for the presence of acid-fast bacilli and, if none are found, by animal inoculation and by culture for the presence of *M. tuberculosis*. Gastric specimens are routinely examined by both techniques.

There are certain limitations to the efficiency and reliability of each of these types of specimens and examinations. The first and most important limitation is the adequacy of the specimen. Expectoration is not synonymous with coughing. The specimen must be sputum, not saliva. A pool of first morning sputa will yield from two to three times as many positives as a single specimen.<sup>5</sup> A correctly obtained and submitted gastric specimen has proved to yield about three times as many positives as pooled sputa, particularly from individuals who raise but little sputum voluntarily.<sup>2</sup>

Clinical pathologist, Division of Laboratories, Michigan Department of Health.



The value and accuracy of the laboratory examination will reflect the care with which the specimen was collected and submitted. Pooled sputum specimens should be submitted to the laboratory either as single specimens for pooling immediately upon collection or kept under constant refrigeration until the pool is completed. Overgrowth of moulds in pooled sputa kept at room temperature is the chief cause of a laboratory report of "contaminated culture." The problems in relation to the submission of gastric specimens are much more complex. There is ample evidence in the literature<sup>1,3,4</sup> that the gastric juice contains a substance unrelated to acidity or gastric enzymes which is toxic to the tubercle bacillus. There is evidence to indicate that there is a decrease in the number of tubercle bacilli in a given specimen of about 25 per cent during the first twenty-four hours of storage at room temperature, of 50 per cent at the end of forty-eight hours and of 75 per cent at the end of the third day. Immediate neutralization of the gastric acidity will decrease, but not inhibit, the rate of destruction of the organisms. The usefulness of this procedure is, therefore, limited to those areas where specimens can be delivered and examined promptly. The laboratories of the Michigan Department of Health have limited examination of gastric specimens to those received in the laboratory within twenty-four hours of collection and have demanded of the personnel that the examination of such specimens be completed on the day of receipt. With these facts in mind it does not seem probable that a pool of gastric specimens collected on three consecutive days will yield a significantly greater number of positive results than a correctly handled single gastric specimen.

The significance of the available laboratory examinations varies greatly. The microscopist can legitimately report only the presence or absence of acid-fast organisms on microscopic examination of slide preparations. Such acid-fast organisms may or may not be tubercle bacilli. This fact has long been recognized in relation to organisms seen in specimens other than sputa and in gastric specimens. Sputum also may contain organisms which are not tubercle bacilli but which have the property of acid-fast staining. An experienced microscopist may recognise some of these as having an "atypical morphology;" others may have the same appearance as the tubercle bacillus.

There are also certain limitations to the significance of the results obtained in the laboratory by cultural methods. The presence of acid-fast chromogenic organisms has been so long recognized and their significance so well established that no further comment is justified. There are, however, organisms recoverable from sputum as well as other types of specimens which show only slight or, in many instances, no variation from the colonial or tinctoral appearance of the tubercle bacillus on culture. Their type of growth so closely resembles that of the tubercle bacillus as to present difficulties in decision to even the experienced bacteriologist. We realize that other workers in this field feel that they can distinguish between virulent and avirulent tubercle bacilli on the basis of type of growth, tinctoral appearance and mode of growth in liquid media. We have not been able to satisfy ourselves that this is uniformly true.

Up to the present writing it is still our belief that the development of disseminated tuberculosis in the test animal is the only reliable criteria for the final and complete identification of an organism as the tubercle bacillus. About 3 per cent of the organisms resembling the tubercle bacillus on culture have failed to produce disseminated tuberculosis upon injection into the test animal. Acid-fast organisms, both tubercle-like and chromogenic, may on occasion produce local lesions at the site of inoculation which grossly resemble those produced by *M. tuberculosis*. Acid-fast bacilli may be found in these lesions. It is, therefore, only when disseminated lesions, characteristic in either gross or microscopic appearance and containing acid-fast bacilli, are found in the test animal that we feel certain of our identification of an organism as *M. tuberculosis*.

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MSMS

BCG vaccine has joined the conventional forms of tuberculosis control in Alaska. With a tuberculosis mortality rate nine times that of the United States, the last outpost of America is mustering every known weapon in its fight against tuberculosis.—ELAINE SCHWINGE, M.D., *National Tuberculosis Association Bulletin*, May, 1949.

# Resection in Pulmonary Tuberculosis

By Cameron Haight, M.D.  
Ann Arbor, Michigan

**D**URING THE past several years pulmonary resection has become recognized as an indispensable measure in the management of certain selected cases of pulmonary tuberculosis and its complications. Although its application is limited to only a very small percentage of patients with tuberculosis, it is often the only procedure which will produce conversion of sputum and recovery in this limited group. It is, therefore, an essential form of therapy in a completely integrated program for the treatment of pulmonary tuberculosis. The term resection is herein used to designate removal of a portion of one lobe (segmental lobectomy), all of one lobe (lobectomy) or all of one lung (pneumonectomy).

The first intentional pulmonary lobectomy for tuberculosis was performed in this country by Freedlander as recently as 1934. The initial cumulative results with resection of tuberculous lesions were disappointing, due to the incidence of post-operative complications, notably bronchial fistulas, empyemas, spreads of the disease and a high percentage of deaths. A notable decrease in the frequency of nontuberculous empyemas and fistulas followed the adoption of the technique of individual dissection of the structures of the pulmonary hilum combined with the use of penicillin. However, the danger of tuberculous infection of the pleura as well as the danger of tuberculous spreads or exacerbations continued to be factors which greatly limited the use of pulmonary resection. Furthermore, the possibility of the late development of new tuberculous lesions was a strong deterrent against pulmonary resection even as recently at 1946.

Since the advent of streptomycin, the outlook has noticeably brightened, in that this drug is capable of reducing the incidence of tuberculous empyemas and bronchogenic spreads, as well as being useful in the treatment of early postoperative spreads or late relapses if resistance to the drug has not already occurred. Streptomycin has also widened the horizon of surgical therapy by improving the condition of certain patients to a degree sufficient

to allow resection to be safely undertaken. This is particularly the case if a co-existing active tuberculous bronchial lesion is present, as it is generally accepted at the present time that an active bronchial lesion is usually a contraindication to resection. Because of the great value of streptomycin in conjunction with any of the major surgical procedures in pulmonary tuberculosis, it is highly important that its effectiveness in the individual patient should not be exhausted by injudicious use of the drug before the time that a major operation may be mandatory. Although the advantage of streptomycin in pulmonary resection cannot be minimized, the proper selection of cases is of greater importance.

The scope of resection in pulmonary tuberculosis is limited, due to the fact that the traditional forms of treatment, including bed rest and the various types of collapse therapy, will ordinarily suffice in arresting the disease. When cavitation has resisted the conservative forms of treatment, thoracoplasty is usually successful, even when the cavity is large. As the risk of thoracoplasty is less than that of resection, thoracoplasty is preferable to resection in most instances of cavernous disease.

Resection is required, however, in order to effect conversion of sputum when a good anatomical collapse by thoracoplasty has failed or when bronchial complications, consisting of stenosis or dilatations, make thoracoplasty unlikely to succeed. A tight stricture of a main or lobar bronchus is a definite indication for resection, as is also the presence of extensive bronchiectasis with positive sputum and without demonstrable cavity, inasmuch as tuberculous ulcerations of dilated bronchi may be the cause of the positive sputum when bronchiectasis has developed in patients with pulmonary tuberculosis. A further indication for resection is an intermittently blocked or inspissated cavity with a narrow draining bronchus, or a completely blocked cavity which is not responding satisfactorily to conservative treatment. Because of the inadequacy of bronchial drainage, these lesions do not collapse well with thoracoplasty and the eventual healing is often incomplete or unreasonably delayed. The above indications constitute the most frequent ones for pulmonary resection, the largest number of our cases being in the group of thoracoplasty failures.

Resection is also indicated in preference to thoracoplasty for the occasional basal cavities



which have resisted other forms of collapse therapy, namely, phrenic paralysis, combined with pneumoperitoneum or pneumothorax. These more conservative forms of treatment, however, will often be effective in the closure of basal cavities. Controversial opinions exist regarding the indication for resection in the so-called "destroyed" lung (total involvement of one lung with active cavernous tuberculosis). We do not regard this condition as an indication for primary resection unless bronchiectasis has already developed, inasmuch as thoracoplasty will usually convert the sputum in such cases, provided that there is no high-grade bronchial stenosis. If doubt exists regarding the choice between thoracoplasty or resection, particularly in cavernous upper lobe disease, thoracoplasty should usually be given preference because it is a less extensive operation and one carrying a lower operative risk. Should conversion of the sputum not occur after thoracoplasty, resection can then be performed. This sequence of procedures is often of advantage to the patient because the total amount of sputum and its bacillary content will usually be reduced by thoracoplasty, thus allowing resection to be done with greater safety than had it been performed as the initial procedure. Resection is also indicated for round, circumscribed pulmonary lesions in which a differential diagnosis between tuberculosis and bronchogenic carcinoma cannot be made. The differentiation between a round, coin-like tuberculoma and a discreet peripheral bronchogenic neoplasm is often impossible without actual removal of the lesion. Excision is the safest plan for the patient. Inflation cavities with a positive air pressure within them due to a check-valve action of their draining bronchus have been regarded by some surgeons as an indication for initial resection. As an adequate thoracoplasty collapse, and on rare occasions supplementary tube drainage of the cavity, will usually be effective in closure of these cavities, we do not subscribe to resection unless thoracoplasty has failed.

A careful evaluation of the patient's resistance to the tuberculous disease is necessary before arriving at a decision in favor of pulmonary resection. A review of all roentgenograms since the first recognition of the disease is essential in order to estimate the location and extent of the original and subsequent disease and its response to previous

therapy. If segmental or total lobectomy is contemplated, no areas of active disease in the portions of the lung which are not to be removed should be present. To leave active lesions on the ipsilateral side is to invite later exacerbation of these lesions. Previous disease in the contralateral lung should be stable and without significant activity. Bronchograms are occasionally indicated preoperatively when one is considering the choice between thoracoplasty or resection. Bronchograms are often required before contemplated lobectomy in order to be certain that bronchiectasis is not present in the other lobe or lobes of the lung whose removal is not contemplated.

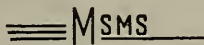
One hundred resections for pulmonary tuberculosis or its complications have been performed at the University Hospital under the protection of streptomycin therapy in the two and one-half year-period prior to July 1, 1949. Sixty-nine patients have been treated by segmental or total lobectomy, and the remaining thirty-one by pneumonectomy. The mortality has been low (3 per cent) when one considers the extent of the operation, the severity of the lesions and the already reduced pulmonary reserve of many of the patients for whom operation has been undertaken. The three deaths to date have been directly attributable to operation; one of these deaths was a result of an early spread of the tuberculosis. The late development of new lesions or the exacerbation of earlier active lesions has occurred in eight patients and is a source of major concern at the present time. This late complication is inherent in the treatment of any case of pulmonary tuberculosis, irrespective of the form of treatment that has been employed, although the incidence of late spreads following resection has been more frequent during a comparable period than following the other forms of treatment. With two exceptions, all the late spreads to date are clearing or have cleared. Because of the possibility of late spreads, we now plan routinely not to exhaust the effectiveness of streptomycin after operation. Instead, the drug is being discontinued as soon as it is evident that no early postoperative tuberculous complication has occurred; it is hoped that resistance to streptomycin will not already have developed, so that it may still be effective in the event of a late spread.

The results of pulmonary resection since the advent of streptomycin have been distinctly encouraging. Those patients having severe cough

and sputum due to bronchial obstruction have been relieved of their symptoms and, usually, they have returned to health. The previous thoracoplasty-failure patients have largely obtained conversion of the sputum, as have those patients with positive sputum due to acquired tuberculous bronchiectasis. The patients with tuberculomatous lesions have had a prompt recovery from a type of tuberculosis which is notoriously reluctant to heal under more conservative forms of treatment. Many of the patients have been operated on too recently for a final evaluation of sputum conversion. The large majority already have negative sputum, an accomplishment which would have been unlikely in most of these particular patients if they had not had recourse to pulmonary resection.

### Summary

Pulmonary resection is an essential form of therapy in a small number of carefully selected cases of pulmonary tuberculosis. The current indications for resection are presented; the greatest need for resection is in the thoracoplasty failures and in those patients with bronchostenosis, extensive post-tuberculous bronchiectasis or tuberculomatous lesions. The early results in 100 patients treated since the availability of streptomycin are distinctly encouraging. The mortality has been low (3 per cent), and the large majority of the patients have negative sputum.



### PRESIDENTIAL ADDRESS

(Continued from Page 1356)

culosis and other chest diseases than we had even a few years ago. We begin to see quite clearly the relative roles of health educators, epidemiologists, sanatorium physicians, private practitioners. Let us earnestly pray that no disrupting revolution will destroy this, the progressive American system of medicine.

A person with tuberculosis has many needs and before we can meet them we must understand them fully. Medical treatment is, of course, the obvious essential. But also to be considered are many factors which have a bearing upon the way a patient responds to his particular therapy. What are these factors? What facilities do our communities have to deal with them? Most patients face a variety of psychological, financial, and personal adjustments which cannot be separated from one another. Emotional reactions to the disease itself influence the acceptance of the diagnosis and treatment.—ROBERT J. ANDERSON, M.D., *Public Health Reports*, June 3, 1949.

NOVEMBER, 1949

## The Changing Trend in the Therapy of Pulmonary Tuberculosis

By Wm. M. Tuttle, M.D.

Detroit, Michigan

THERE ARE probably few diseases, which over a period of years have been attacked by as many and varied methods of therapy as has pulmonary tuberculosis. The cycle has moved in many directions. At the turn of the century treatment consisted in exercise, and the sanatoria of that day were so placed that the patient could walk for long distances in the woods, or climb mountains or ride horseback. In truth, the limitations of exercises were curtailed only by the patient's disability and inability to engage in them.

The era of the full life in therapeutics came to an end with the Trudeau school, and rest, the strictest sort of rest, replaced the principle of full exercise. Treatment was then a matter of rest, air and food. There was apparently some difference of opinion as to the type of air breathed for the great centers of treatment grew up in strangely diverse places, namely, in the warm, sandy wastes of the Southwest and the cold wooded mountains of upper New York. Another school apparently felt that therapeutic value could be derived from the oxygen thin air of the Colorado mountains. Actually, climate undoubtedly had little to do with the eventual recovery of the tuberculous patient. Those who lived were remembered by their physician. Those who died were buried both in body and mind. The ratio of success was not great.

It was finally shown by careful investigative work that patients with cavernous tuberculosis had only about a 10 per cent chance of being alive five years later. The pendulum was swinging toward more active forms of treatment which were directed at the closure of pulmonary cavitation and the conversion of sputum. This was during the early nineteen twenties.

Before the year 1900, the principle of collapsing the lung with air had been suggested and tried. Gradually, through the years that followed, this method of treatment gained ground, although only slowly, for the inertia of those who believed in



climate and bed rest was great and their influence in the medical world was greater.

Pneumothorax was not always possible to induce and in many other instances it was ineffective. Thoracoplasty and phrenic nerve paralysis were introduced by the Germans and finally found favor in this country.

Progress in the so-called surgical approach to treatment gradually gained ground. This was especially true in the midwestern states and notable among these was Michigan. By 1935 approximately 80 to 85 per cent of patients hospitalized in Michigan sanatoria were receiving some form of collapse therapy.

The more direct surgical approach, namely, thoracoplasty, was shown to be capable of converting sputum in approximately 85 per cent of patients. This was in 1933.

By the time the late nineteen thirties had been reached, it was becoming evident that pneumothorax was often injudiciously used, that its complications were high and often most difficult to cope with. There began a definite swing away from pneumothorax in favor of the more permanent collapse offered by thoracoplasty. Furthermore, the long term results given by thoracoplasty were better, the incidence of recurrence of disease less, and the complication rate much lower.

Throughout the years, an antibiotic which would act favorably in tuberculosis had been sought. This was found in streptomycin. It was immediately thought that all forms of collapse would now be needless; however, the converse became true. With the advent of streptomycin, the surgical approach to tuberculosis increased by several fold. Thus, at the Herman Kiefer Hospital in Detroit, there were 233 stages of thoracoplasty done in 1938, whereas in 1948 there were 785 stages done, an increase of over three times.

Pneumothorax as a method of treatment has fallen off, not only as a result of the advent of streptomycin, but because, as previously stated, it carries with its use certain definite complications. In 1938, there were 14,918 pneumothorax refills given in Herman Kiefer Hospital; in 1948, the number had fallen to 2,822.

Streptomycin has made possible the use of pulmonary resection in the treatment of pulmonary tuberculosis. Whereas in 1938 no pulmonary resections were done at Herman Kiefer Hospital, in 1948 seventy were done.

A recent study of therapeutic procedures in the states of Minnesota, Wisconsin and Michigan reveals that pneumothorax is much less commonly used than previously and has been replaced by either streptomycin alone, or combined with phrenic nerve paralysis and pneumoperitoneum. Thoracoplasty, as a primary procedure after streptomycin or combined with it, has replaced many pneumothoraces. In certain selected patients pulmonary resection has proved most effective.

Pulmonary tuberculosis is today more than ever a surgical disease. Streptomycin has increased this outlook, for it has prepared many patients for surgery who would not otherwise have reached a point where surgery was feasible. It has made surgery possible where before it could not safely have been used. Surgery has not, however, replaced bed rest, nor will it. Surgery lays the ground work and makes healing possible.



#### PLANS FOR NEW PROJECT

With a grant of \$3,000,000 from the Kresge Foundation for a new research building, the University of Michigan has announced plans for a giant medical center.

The entire program will cost \$20,000,000.

The present 1,000-bed University Hospital will be the key structure in the new medical center.

In addition to the research building, which will include elaborate laboratory facilities, an amphitheater, medical library and conference rooms, there will be four buildings.

These will be an outpatient clinic, maternity hospital, medical and nursing education building and a children's hospital.

The additions will enable the university to enlarge its medical student enrollment—now 500—so that it will exceed that of any other American university.

Some 1,500 medical school applicants were rejected this year.

All medical work will be removed from the campus proper, according to President Alexander Ruthven. The medical school's present buildings will be turned over to the engineering school.

The school of public health, school of nursing, neuropsychiatric institution, veterans rehabilitation center and Simpson Memorial Institute will be linked to the medical center.

# Thoracoplasty

## Ten Years' Experience

By A. L. Stanley, M.D., and  
J. L. Isbister, M.D.  
Lansing, Michigan

WE WISH TO present briefly our experience in the treatment of pulmonary tuberculosis by thoracoplasty over the past ten years. Approximately one-half of the patients in this series have been referred for operation from five of Michigan's County Sanatoriums varying in bed capacity from sixty-five to 140 beds. In these patients, the preoperative studies, the convalescent care and follow-up have been carried out by the home sanatoria. Principles which have long been recognized as essential to a high degree of success in the treatment of pulmonary tuberculosis by thoracoplasty will be re-emphasized. Certain changes in the standard technique which we believe have aided in the attainment of uniformly good collapse, the minimizing of deformity, reduction in the number of secondary procedures necessary to obtain conversion of the sputum and, last but not least, contributing to the comfort of the patient while he is undergoing the surgical procedures and during his convalescent period will be presented.

### Procedure

Since the appearance of the first edition of Alexander's *Collapse Therapy in Pulmonary Tuberculosis* there has been an increasing awareness of the necessity for the resection of long rib segments over the area of disease, together with the corresponding transverse processes of the spine, if the higher rates of cavity closure and permanent arrest of the disease process are to be attained. All cases in this series have been treated by resection of long segments of all ribs overlying the diseased area of the lung, together with the corresponding transverse process of the spine, flush with the vertebral lamina.

In addition to this, the corresponding rib heads have been removed in nearly all cases. Also in five-sixths of the cases the first three or four costal cartilages have been removed subperichondrially, together with the margin of the sternum, through

a single anterior stage. Whether or not the removal of the rib heads *per se* has contributed materially to the conversion rate is not entirely clear, but we are of the opinion that the certain and complete detachment of the intercostal muscles from the spinal muscles down to the vertebral lamina in each case is essential. Figure 1 shows the complete separation of intercostals from the spinal muscle in a lower stage. When this detail is slighted, suspension of the rib beds posteriorly, in the region where cavities most often exist, frequently occurs.

It is intriguing, particularly in the early stages of one's experience with thoracoplasty, to resect rib segments as illustrated in Figure 2, hoping to conserve pulmonary tissue and at the same time attain adequate collapse over the area of the disease, but when one remembers that shortening takes place in the axis of the periosteal bed, resultant collapse of the character shown in Figure 3 is not surprising. Revision with adequate resection gives adequate collapse and cavity closure (Fig. 4).

During the earlier years a three-week interval between stages, with formalization of the periosteal beds, was employed. However, failure of rib regeneration with herniation of the lung in two observed cases led to the abandonment of formalization and the employment of a two-week interval. Coincident with this change, adequate replacement of blood during operation was made routine.

The observations that braces, strapping, sand bags, et cetera, contribute to the patient's discomfort, that the external pressure often contributed to muscle atrophy and the additional observation that fluid remaining in the thoracoplasty space after a first-stage procedure gave excellent collapse, led to the purposeful encouragement of the retention of fluid in the thoracoplasty space after all stages by the initial instillation of saline solution, following closure, through a catheter left in place during closure. Fluid pressure has proven to be a most effective compressive medium, and in addition, it has markedly reduced paradoxical motion, which is a major cause of circulatory and respiratory disturbances following operation. To attain this objective it is of course required that the pleura not be torn and that the wound be closed accurately in layers in order to effect a water tight closure. While this has added somewhat to operating time, it is noted that the infection rate has declined and, in fact, almost disappeared. Formerly it was noted that the loosely closed wounds allowed

From the Ingham County Tuberculosis Sanatorium, Lansing, Michigan.





Fig. 1.

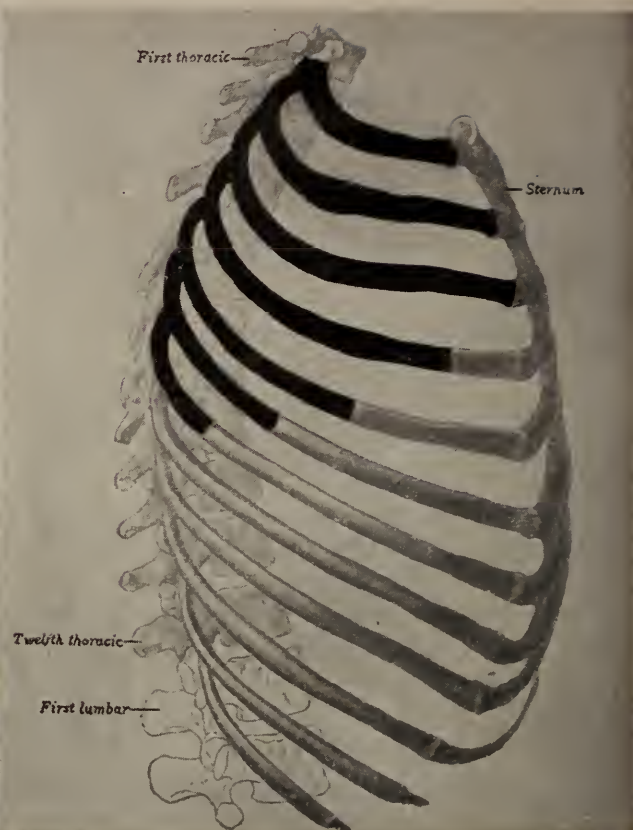


Fig. 2.

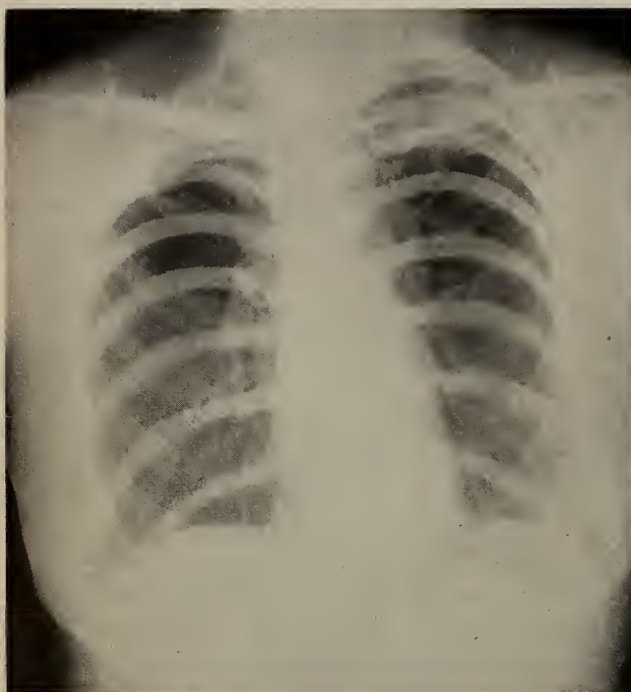


Fig. 3.



Fig. 4.

serum drainage which saturated dressing and that these saturated dressings allowed passage of invading organisms. The retained fluid effectively prevents subscapular adhesions between stages with-

out the interposition of foreign materials. There is also deposited, from the retained serum, a layer of fibrin over the thoracoplasty bed leading to the formation of a fibrous envelope which effectively



Fig. 5a.



Fig. 5b.

prevents its elevation when the fluid absorbs (Fig. 4).

With the abandonment of all external pressure or corrective devices, the patients are trained to maintain overcorrection to the thoracoplasty side at all times during the convalescent period and a full-length mirror has been installed in each room so that they may observe the degree of correction. The tip of the scapula has in recent years been resected in all six and seven rib resections in order to relieve impingement and resulting pain. It is essential that all of the scapular periosteum be removed to insure a smooth comfortable stump and good shoulder function.

In the routine postoperative management, when the sputum and gastric washings have been negative for tubercle bacilli on both culture and guinea pig examinations for six months, the patient gradually assumes bathroom privileges over the period of a month. He then is discharged to his home, where activity is gradually increased to a full eight-hour work day over the next eighteen months. He is re-examined regularly, and a week's collection of sputum material is searched for tubercle bacilli by culture and guinea pig examination at three-month intervals.

Figure 5, a and b, shows a patient and the chest x-ray following the completion of a three-stage thoracoplasty.

### Statistics

Table I shows the number of patients treated each year by thoracoplasty over the ten-year period.

TABLE I. THORACOPLASTIES INGHAM SANATORIUM, 1939-1949

Number of Patients—131			
1939.....	8	1944.....	4
1940.....	11	1945.....	21
1941.....	13	1946.....	10
1942.....	13	1947.....	24
1943.....	9	1948.....	22

Table II shows types of procedures employed with number of stages.

TABLE II. PROCEDURES

	Number	Stages
Standard thoracoplasty.....	122	388
Schede thoracoplasty.....	3	7
Revision thoracoplasty.....	16	46
Total .....	141	441

Table III shows types of disease for which thoracoplasty was employed and also the known duration of the disease before operation.

TABLE III. TYPE OF DISEASE N.T.A. CLASSIFICATION

II-A .....	2
II-B .....	55
III-B .....	64
III-C .....	6
Empyema .....	1
Bronchopleural fistula with cutaneous sinuses.....	1
Removal of paraffin pack.....	2
Average known duration of disease before thoracoplasty, 3.5 years	
Range, 1 month to 30 years.	

Table IV shows the activity status of these patients on January 1, 1949.



TABLE IV. PRESENT STATUS OF 131 PATIENTS

74—Well and working (81 per cent of those operated over 2 years and possible to be followed)
33—Operated upon less than 2 years (In sanatorium or convalescing at home)
7—Impossible to follow (3 positive and 4 negative when last heard from prior to 1943)
11—Dead
6—In sanatorium more than 2 years after thoracoplasty.
C.A.—Home negative 6 years; back in 2 years and positive.
J.B.—Admitted 1931; operated upon 1940; still positive and in sanatorium.
E.F.—Home negative 4 years; back in positive 3 years; now is negative following contralateral extrapleural oleothorax.
L.R.—Hernia of right lung; revision 1944. Still positive in sanatorium.
D.S.—Operated upon 1945; still positive in sanatorium.
I.S.—Operated upon 1945; now negative and ready for discharge.

Table V shows the sputum status. Subtracting the seven not followed and the 11 dead from the total of 131 leaves 113 patients in whom the rate of sputum conversion and present sputum status is known.

Table VI gives an analysis of the deaths.

TABLE V. SPUTUM CONVERSION 113 PATIENTS

Time	Patients	Per cent
3 Months	55	45
6 Months	66	58
9 Months	82	72
12 Months	85	75
18 Months	89	79
2 Years	90	80
3 Years	91*	81
4 Years	93†	82
6 Years	94**	83

\*1 after phrenic and streptomycin.

†2 after revision and lobectomy, respectively.

\*\*1 while working.

7—In sanatorium, positive, operated upon 12 months or less.

2—In sanatorium, positive, operated upon 12 to 18 months ago.

2—In sanatorium, positive, operated upon 18 months to 4 years.

1—Recurrent after 6 years. Now positive in sanatorium.

1—Recurrent after 4 years. Now negative after contralateral oleothorax.

1—In sanatorium, first stage in 1945. Now has cavernostomy. Questionably positive.

1—Positive 4 years postoperative, working full time.

1—A drifter. No examination. Physically active and looks well.

1—Insane at home. No examination. Seems well.

TABLE VI. DEATHS—11

Age	Time P.O.	Procedure	Year	Cause of Death
M.G. 31	8 days	3rd stage thoracoplasty	1940	Questionable right heart failure.
P.F. 29	5 days	2nd stage revision	1941	Transfusion reaction; anuria.
R.J. 38	4½ yrs.	1st stage thoracoplasty	1941	Progressive disease.
M.C. 30	21 days	4th stage thoracoplasty	1941	Severe wound infection, broncho-pneumonia, pulmonary edema.
R.H. 22	4 days	1st stage revision	1942	Circulatory failure, pulmonary edema.
C.D. 30	9 days	3rd stage thoracoplasty	1945	Coronary occlusion.
H.P. 40	8 days	1st stage thoracoplasty	1945	Pulmonary thrombosis, chronic myocarditis.
A.B. 71	8 days	1st stage thoracoplasty	1946	Pulmonary embolism, chronic adhesive pericarditis and myocarditis.
A.J. 26	3 days	1st stage thoracoplasty	1947	Acute right heart failure.
G.H. 64	14 hrs. 9 yrs.	Right pneumonectomy	1948	Coronary occlusion.
		Right thoracoplasty		
		Right revision		
M.G. 27	3 days 10 wks.	1st stage right thoracoplasty	1948	Cerebral embolism.
		Left decortication		
Mortality rate:		Per case 8.4%	Per operation 2.5%	

Patients are oftentimes reluctant to accept treatment by thoracoplasty because they are familiar with the low survival rates shown in certain published series. They do not so much fear the operative mortality but rather the increasing number of deaths shown each year due to progressive

disease. It therefore seems worth while to point out that no patient in this series has yet died of progressive disease following the completion of a satisfactory thoracoplasty. The one individual who died of progressive disease died four and one-half years after a single thoracoplasty stage.

## MASS CHEST X-RAYS

(Continued from Page 1365)

When the screening program, after it has passed over its group of subjects, leaves its 3 to 5 per cent residue adequately referred to the medical profession for investigation, and when that investigation is thorough enough and sufficiently long continued, then the combined procedure will have high efficiency.

We conclude that the corollary of mass chest survey is subsequent careful, individualized, continued investigation either by, or through referral by, the family doctor. It is our responsibility as practicing physicians to make sure that both stages are properly interrelated, to maintain the morals of the patient and his family during the second stage of investigation, and to do or to refer the patients for the medical follow-up which will supply the actual end results of chest survey work done in our communities.

# Tuberculous Meningitis

By Donald C. Young, M.D.,  
Edna M. Jones, M.D., and  
W. L. Howard, M.D.  
Northville, Michigan

UNTIL QUITE recently tuberculous meningitis was a fatal disease. With the advent of streptomycin, tuberculous meningitis is not necessarily a fatal disease.

Streptomycin therapy in the treatment of tuberculous meningitis was instituted at Herman Kiefer Hospital in March, 1947, and at Maybury Sanatorium in April, 1947. Up until May 1, 1949, eighty-four patients had been treated with streptomycin; forty were adults and forty-four children. Sixty-one of the eighty-four patients (73 per cent) are dead; twenty-three patients (27 per cent) are living and show no clinical evidence of tuberculous meningitis.

## Diagnosis

Most of the eighty-four patients in this series were received from private physicians and by transfer from other hospitals and had well-established meningitis at the time of admission. Those patients in which meningitis developed while under medical observation and in which treatment was instituted early provided most of the cases which recovered. Early diagnosis is essential to the recovery of tuberculous meningitis.

In over 35 per cent of the cases there was a history of some other form of tuberculosis in addition to the meningitis. In general, the history included headache for periods ranging from one week to two months, elevation of temperature, loss of appetite, loss of weight, inability to continue physical and mental work, and in the majority of cases an irrational state, varying from short periods of stupor to deep coma. When the meningitis developed while under observation, the adults complained of headache and a sense of impending illness, and the children presented a change in disposition, characterized by apathy with irritability, restlessness, unexplained fever, loss of appetite and constipation as the earliest symptoms.

At the time of admission the patient usually was moderately irrational or mentally dull and responded to questions slowly or not at all. A few were in extremis, with deep coma, failure to react

to stimuli, excessive salivation and stertorous breathing. Regardless of the severity of the disease or the condition of the patient, the neurological signs characteristic of meningitis were present with few exceptions. Further aid in making the diagnosis was obtained from a spinal tap. Characteristic findings were as follows: fluid clear or slightly hazy and under increased pressure; cell count increased, ranged 30 to 300 cells; polymorphonuclear cells predominated early, but later lymphocytes were more numerous; acid-fast bacilli were occasionally found on culture; sugar content ranged from 0 to 60 mg. per cent; proteins were elevated and ranged 70 to 500 mg. per cent; chlorides were slightly reduced, and a web was not usually seen.

Those patients who were admitted in the advanced stages of the disease showed some or all of the characteristic physical signs of meningitis. Those children in which meningitis developed while they were under observation did not present the "classic" clinical picture of meningitis. Almost all of them had elevation of temperature. They showed a loss of interest in their surroundings, a lack of interest in food and a sluggishness not previously noted. Upon handling the children, one was aware of an increased irritability. They resented being moved. One got the impression of vague tenderness over the body and pain upon flexing the legs, but the patient almost never admitted having tenderness or pain. Characteristic neurological signs were almost never present at this stage of the disease, but a spinal tap invariably showed some increase in cells.

In a child who had other tuberculosis or who was a known active contact to a case of open tuberculosis, we felt we could justify a tentative diagnosis of tuberculous meningitis and start treatment with those meager findings. More typical findings usually developed very rapidly, at which time the diagnosis could be confirmed. When no tuberculosis background was present, it was then necessary to wait for more confirming signs before making the diagnosis. In our opinion it was better practice to err on the side of making an early diagnosis than to miss the opportune time for instituting curative therapy.

## Therapy

Streptomycin must be used in doses of near maximum tolerance until the life-threatening phase of the disease has passed and then in less intensive



dosage until the disease has long-since produced no symptoms—even up to twelve to fourteen months.

Regular streptomycin was used in the treatment of this series of eighty-four cases. At Herman Kiefer Hospital during the first year, patients were given streptomycin every four hours day and night.

Subsequently four equal daily doses have been given at 8:00 a.m., 12:00 noon, 4:00 p.m. and 8:00 p.m. There was no apparent loss of effect from eliminating the midnight and the 4:00 a.m. doses. Streptomycin was given intrathecally to every second case with the alternate cases being used as controls. There was no statistical significance in the difference in the recovery rate of the group treated with and without intrathecal streptomycin. The following schedule was used:

*Intramuscular streptomycin:*

1. Adults, fifteen years and over—2 grams per day for one month, then 1 gram per day for five months. When the patient also had miliary tuberculosis the 2-gram daily dose was continued for two months and the 1-gram dose for four months.
2. Age six to fourteen years—1 gram daily for six months.
3. Under six years—0.5 gram daily for six months.

*Intrathecal streptomycin:*

1. Adults—100 milligrams every second day for one month.
2. Children—50 milligrams every second day for one month.

At Maybury Sanatorium where all of the cases in this series were children and all had either developed their meningitis while under observation or had been transferred to the service with still early meningitis, an equally intensive course of streptomycin therapy has been used. Because of the wide variation in the size and weight of these children—ten months to twelve years—a more complicated dosage schedule was found to be necessary. The following formula for streptomycin therapy was established in September, 1948.

*Intramuscular.*—25 to 40 milligrams per pound of body weight per day for four to six months depending upon the clinical and spinal fluid response, and then 10 to 20 milligrams per pound per day for the balance of the six months period, or longer if indicated.

The number of daily injections was determined by the size of the child and the total volume of the daily dose of streptomycin in solution. It varied from one to four injections.

*Intrathecal.*—1 milligram per pound—up to 50 milligrams—given daily for three weeks, then 50 milligrams three times per week for three months, and then 25 milligrams twice a week for the balance of six months, or longer if indicated. Intrathecal streptomycin should not be given if the child has a Potts disease or if the injections cause undue irritation.

### Relapse

It was necessary to re-treat eleven of these eighty-four patients because of relapse which occurred from three weeks to two months following the completion of the first course of therapy. Eight of the patients in relapse expired with no perceptible improvement in the clinical condition. The remaining three were making unsatisfactory progress at the completion of this period of study (May 1, 1949).\*

Relapse was more prevalent when the meningitis was of long standing at the time therapy was started and when therapy was discontinued before the completion of a six-month course.

Relapse must be kept constantly in mind and the "survival" patient watched closely for the return of symptoms for twelve or more months after he is apparently cured.

### Dihydrostreptomycin

An experience with nine successive cases of tuberculous meningitis treated with dihydrostreptomycin during a period of six weeks, in which there were no recoveries and no apparent clinical improvement in the condition of the patients, suggested that this agent should be used with great caution in the treatment of this disease.

### Streptomycin Toxicity

It is known that streptomycin is toxic when used in large doses. With the intensive therapy necessary in these cases, toxic manifestations were found very frequently. In adults dizziness and diplopia were frequent and early toxic signs; loss of equilibrium was occasionally noted, but impairment of hearing rarely developed. Both spastic and flaccid hemiplegias have been seen. Clonic convulsions occurred in one case and an urticarial type of rash in four cases.

In the Maybury cases all of the intensively

\*Note: Inasmuch as streptomycin was of no apparent value when relapse occurred, it was decided in June, 1949, to evaluate the effectiveness of para-amino-salicylic acid. Two patients have recently been treated with this agent. The first recovered very promptly and is now asymptomatic. The second showed clinical improvement seventy-two hours after PAS was started and was able to sit up in bed at the end of one week. This experience was by no means conclusive but suggested that PAS was the therapeutic agent of choice in the treatment of relapsing tuberculous meningitis.

treated children developed dizziness and some degree of loss of equilibrium. One child became deaf. Many of them had digestive disturbances, transient skin rashes, joint tenderness and circum-oral parasthesia. The children compensated very quickly and quite completely for loss of equilibrium, and it was often that the loss was detected only by making blindfold or mattress-walking tests. The adults compensated very poorly for this eighth nerve damage and suffered a very definite disability. Even though it was fairly certain that the damage was caused by streptomycin, it was still a worthwhile price to pay for the curative effects of the drug.

### Prognosis

The clinical condition at the time of admission to the hospital was not a reliable prognostic criterion. It was observed that certain individuals apparently in good condition proceeded rapidly to extremis, whereas others in deep coma improved steadily as soon as streptomycin therapy was begun. It is to be emphasized that cerebrospinal fluid findings prior to the institution of treatment were *not* a reliable guide to the ultimate outcome in tuberculous meningitis and were of little or no value in prognosis. This was particularly true of variations in the cell count, quantitative sugar and total protein determinations. Furthermore, great changes did not necessarily mean a poor prognosis and slight changes a good prognosis. Prognosis was definitely influenced by the type of tuberculosis present in addition to meningitis. Miliary tuberculosis with meningitis should be given a hopeless prognosis unless treatment is started within a few hours of the onset of symptoms. More than 85 per cent of deaths in our series occurred in patients with meningitis plus an additional miliary, pulmonary, or severe primary tuberculosis.

The important factor of treatment which influenced the recovery rate was the duration of the disease before streptomycin therapy was instituted. In the sixty-one patients who expired there was an average of twenty-two days of illness prior to therapy, while in the twenty-three patients who recovered there was an average of thirteen days of prior illness. When treatment was started within two days of the onset there were no deaths.

### Summary

The results obtained from the treatment of eighty-four cases of tuberculous meningitis with

streptomycin are reported. That even with the curative effects of this preparation only twenty-three (27 per cent) of these patients recovered may be mainly due to the fact that most of them were permitted to develop well-advanced meningitis before they were referred for treatment. The excellent results of using streptomycin in early cases are described. Aids to diagnosis are outlined. The formulas for using streptomycin in adults and children, both by the intramuscular and the intrathecal routes, are recorded. The toxic complications of streptomycin therapy are described, and the factors influencing the prognosis are discussed.

### Conclusions

Streptomycin is a life-saving treatment for tuberculous meningitis. For it to be effective it must be used very early in the course of the disease. Streptomycin by the intramuscular route is universally accepted, but there is some uncertainty about the need or value of streptomycin by the intrathecal route. Toxic manifestations are frequent when the necessarily large doses are used. Children tolerate streptomycin better than adults. Relapses are frequent and respond relatively badly to further streptomycin therapy.

### MSMS

### VITAMIN B<sub>12</sub>, EXERCISES AID VICTIMS OF PERNICIOUS ANEMIA

Spinal cord degeneration, which is one of the most sinister complications of pernicious anemia, can be reversed if treatment with vitamin B<sub>12</sub> and exercises is begun early enough, say three doctors from the Mayo Clinic, Rochester, Minnesota.

"Our study indicates that degeneration of the spinal cord associated with pernicious anemia is reversible if intensive treatment is instituted early," Drs. Byron E. Hall, Frank H. Krusen, and Henry W. Woltman write in the September 24 issue of *The Journal of the American Medical Association*.

"Early diagnosis, therefore, is essential," they add. "Treatment consists of administration of vitamin B<sub>12</sub> and daily use of co-ordination exercises. Prompt, energetic, and unremitting treatment is imperative.

"The simple arrest or reversal of the neurodegenerative changes by the administration of vitamin B<sub>12</sub> without the use of a well directed exercise program will not accomplish return toward normal co-ordination and function of the extremities as rapidly as when the exercises are added. They start with the patient in the recumbent position, become gradually more complex, and progress to exercises given in the sitting and finally in the erect position."

The doctors base their conclusion on results obtained in treating twelve patients for degeneration of the spinal cord associated with pernicious anemia.



# Care Awaiting Hospitalization

By Charles R. Smith, M.D.  
Houghton, Michigan

**N**OTHING WRITTEN here may be taken to justify a moment's delay in admitting a patient with active tuberculosis to the sanatorium. In treating tuberculosis there is no substitute for sanatorium care. Treatment at home should be undertaken only when delayed admission is unavoidable.

The care of tuberculosis has three principal aims: (1) prevention of transmission of the disease to others, (2) treatment, (3) diagnosis.

In trying to prevent transmission of the disease, the physician is fortunate if he can enlist the help of the local health department. A good public health nurse can do much for the patient and the patient's family by instruction, demonstration, and encouragement in carrying out isolation technique. If this service is unavailable, the physician must carefully instruct the patient and family.

The person caring for the patient should be instructed in detail in regard to washing hands, collection and disposal by burning of all sputum or other infectious material, the use and care of masks and gowns, the handling and sterilization of the patient's dishes, et cetera.

If children must remain in the home, they should be rigidly excluded from the part occupied by the patient.

The patient should have separate toilet facilities.

Articles of cotton or other boilable material may be sterilized by boiling. Non-boilable articles may be sterilized by ordinary cleaning and airing in direct sunlight.

The basic treatment of tuberculosis is rest. Other treatment, whether by drugs or collapse therapy, is not a substitute for rest but merely supplemental. This cannot be too strongly emphasized. Even physicians especially trained in tuberculosis are tempted sometimes to forget this fundamental truth. We must ever bear in mind that rest is most important. Fortunately, rest at home is possible if the patient, the patient's family, and the physician are convinced of the necessity. Rest should be strict, in bed. It is better to err on the side of too strict rest rather than to allow too much activity. Rest should be mental as well as physi-

cal. Visitors should be restricted in number and length of visit. Politeness may be thrown out the door. Worthwhile visitors will understand. Only visitors that will benefit the patient should be allowed, never more than two in one day, and never exceeding one-half hour.

Symptomatic treatment may be used as required.

Beyond this, no other treatment is advised except after consultation with a physician experienced in the treatment of tuberculosis.

In particular, streptomycin or other chemotherapy should not be used unless clearly indicated.

If indicated, phrenic nerve crushing can be done at the sanatorium and the patient returned home the same day.

A common serious error is to regard pleurisy with effusion too lightly. Pleurisy with effusion otherwise unexplained is tuberculosis. Some place the minimum rest treatment at twelve months, certainly never less than six months. Improperly managed, at least 50 per cent of patients with tuberculous pleurisy with effusion will die within five years.

In diagnostic work we assume that a chest x-ray has been made. Whether the tuberculosis is pulmonary or extra-pulmonary this must be done. It is most embarrassing to the physician to have a patient with extra-pulmonary tuberculosis later found to have pulmonary tuberculosis and no x-ray taken.

Seven twenty-four-hour sputum specimens should be collected and one specimen mailed to the laboratory each day with the request to pool the specimens and, if otherwise negative, to inoculate into a guinea pig and/or culture.

The above procedures are essential. Blood count, urine examination, and sedimentation rate are desirable.

All contacts of the patient should have a chest x-ray. Children should have a tuberculin test, being careful to use only freshly prepared material, and if it is positive they also should have an x-ray.

==MSMS==

The President tried to compel Congress to reappoint Leland P. Olds to the Federal Trade Commission. The subcommittee rejected him, the full committee rejected him, but that was not sufficient, and so the whole Senate rejected him—53 to 15. We hope this might be a foretaste of what is coming; at any rate, this is much better news than the FBI news of approximately the same date.

Dr. Smith is Superintendent, Copper County Sanatorium, Houghton, Michigan.

# Management of the Patient in the Post-Sanatorium Period

By George A. Sherman, M.D.  
Lansing, Michigan

THE PRESENT status of the management of the patient in the post-sanatorium period is a mixture of old and new ideas as to what are the important issues when one attempts to give advice or supervision to the patient who has reached this stage in his recovery. In the past, and to too great an extent in the present, this important responsibility is delegated to the junior member of the medical staff, and therefore the inexperienced.

Two basic objectives should dominate the program for post-sanatorium care:

1. Protection of the public health (discovery of positive sputum at the earliest possible date).
2. Development of a program whereby the patient will return in the shortest possible time to full activity and normal life consistent with the amount and type of tuberculosis he has.

The constitutional factors which in the end so often determine continued good health or a relapse are so intangible that we can only evaluate them after the years have passed and we see who has survived and who has fallen by the way.

The early post-sanatorium years are the time when the sanatorium physician is trying to decide if the patient belongs in the group who remain well or if he is in the group who sooner or later (and frequently sooner) will relapse.

The time-tested signals by which we recognize the direction being taken by the individual patient include the unchanging x-ray, the persistently negative sputum, and the continued sense of good health. For a long time to come we will still have to depend upon an unchanging x-ray and general evidences of no impairment of the general health. Examination of gastric contents in the opinion of many competent people is not necessary for proper control of the average patient. There is no present uniform agreement that positive gastric findings alone indicate that the patient is a health menace. Reactivation of disease that threatens the patient's health and life can, in a great majority of cases, be determined by measures other than dependence upon gastric findings. The patient who has an unchanging x-ray (considered to be that

of a well-stabilized lesion), who is not aware of any unusual symptoms, and whose sputum is negative by culture, will rarely be in jeopardy when supervised in this manner.

If there is one place in the whole field of medicine where the x-ray film and the laboratory findings take the place of the patient himself, it is in the field of tuberculosis. Hours and hours are spent in conferences reviewing the cold facts obtained from the study of dozens of films and typewritten laboratory reports, with little or no knowledge of the personality, the hopes and fears, aspirations, weaknesses and strengths and all the other parts of the patient's human personality. These personal factors too often enter but little into the decisions that are dictated into the wax cylinder, copies of which are sent to the family physician and the health department. The patient himself is apt to be delegated to the nonmedical lay person known as the rehabilitation worker. Notable exceptions to this rule of course happily prevail, but they are all too few.

The type of treatment outlined above is the sort of horror that some of us have glimpsed in the days when the state would become the doctor and the rest of us would be members of the conference dictating reports, holding conferences and sending little notes out to the patient by way of a public health person that it was time to come in for another x-ray.

"Patients are people. They have intellect, imagination and emotions—they have souls. No two people react alike to the same disease, and few human miseries are caused entirely by pathologic alterations of body structure."\*

The patient is a partner in the business of getting well. As a matter of fact, he is in many ways more important than the physician and frequently can take the lion's share of praise for achieving recovery. Next to the patient stands the understanding, sympathetic, well-trained chest physician. The laboratory is important, but like the electrocardiogram in heart disease, it constitutes only about 5 per cent of the factors necessary for proper management of the patient during the postsanatorium period.

Never before in the history of this country have we had more men in private practice with a better understanding of what the whole prob-

(Continued on Page 1421)

\*Hinshaw, H. Corwin: The present status of tuberculosis control. Nat. Tuberc. A. Bull., (July) 1949.



# Role of the Sanatorium in Rehabilitation

By James R. Acocks, M.D.  
Marquette, Michigan

THE ROLE of the sanatorium in rehabilitation is only a portion of the duty the sanatorium has to the community in the control of tuberculosis. In discussing the relationship of the sanatorium and rehabilitation, it is important to consider two other factors, i.e., treatment and case-finding.

The sanatorium in the community is considered by the general public to be merely a place where one goes when he has tuberculosis and if he is lucky he gets out in a few years. The older members of the community remember it as a place where you go when you become so ill that the folks at home can no longer take care of you. In recent years the sanatorium has added the second function, case-finding. A large number of the sanatoria direct the case-finding in their areas and follow up the cases found. This function has resulted in finding the cases earlier, and consequently the sanatorium is better able to treat them. It has only been in the past few years that rehabilitation has been added as the third function of the sanatorium. Thus the role of the sanatorium in control of tuberculosis may be summed up briefly as: find the tuberculous, treat the tuberculous, and rehabilitate the tuberculous.

Rehabilitation may be said to have started when the diagnosis of tuberculosis is made and/or with the earliest sanatorium contact. In the large majority of cases the diagnosis is made by the sanatorium, and the problem of discussing the diagnosis, the treatment, and the prognosis is given the sanatorium. This, we believe, is proper, since the sanatorium has the facilities and the proper personnel to carry out this important function. The old attitude and advice given the patient that "Oh, a couple of months in the 'San' will fix you up as good as new" has been displaced by hard common sense in trying to instill into the patient that the attitude he should have is not to get out of the sanatorium but that his main objective should be to get well. When he gets well, there is no question that he will be able to go home.

The family physician is still the primary discoverer of patients with early tuberculosis, and he is becoming more and more tuberculosis conscious. There are more referrals made for routine chest x-rays as a part of a routine general physical examination each year. In questionable chest lesions he displays intense interest in the original diagnosis, but after the diagnosis of tuberculosis is made and the proper course is outlined to the patient, he is happy to turn the rest of the job over to the sanatorium because he too has recognized that the proper place to treat tuberculosis is in the sanatorium and not at home.

At the first interview with the patient at the sanatorium an appraisal is made of the patient, and the family is interviewed, if possible, so that the sanatorium will know the family's attitude and feelings toward the patient and especially toward the disease, tuberculosis. An attempt is made to ascertain who will care for the family in the absence of the patient. The type of work formerly done will be gone into at some detail, and we try to find out exactly what the attitude of his former employer is toward tuberculosis. An evaluation of the former job is made and an opinion is formed as to whether or not the patient will be required to train himself for another job; usually he must. During this interview an attempt is made to explain to the patient something about tuberculosis and to try to dispel any preconceived notions about the disease that he may have received from his nextdoor neighbor that are not in line with our present-day concept of the disease. Also a very rough estimate of the period of hospitalization is given to the patient at this time, attempting to explain all of the variable factors and especially that tuberculosis is an individual disease and must be treated individually.

Following hospitalization, the patient is seen regularly by the doctors, nurses, rehabilitation workers, and the occupational therapist, during which time he is subject to much quiet observation. His personality is studied, his attitude toward his surroundings and his fellow patients is observed. Thus, the sanatorium has many opportunities for observing the physical, intellectual and personality patterns of the patient. Various tests are given and the vocational life is discussed with him. Never should he be ignored because his case may appear hopeless from the x-ray point

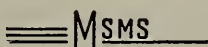
From Morgan Heights Sanatorium, Marquette, Michigan.

of view, because many of our best patients once appeared hopeless on admission. Occupational therapy should be started early in the period of hospitalization, and if his vocational problem can be solved he may start directly on his training even though he may still be a strict bed patient. We firmly believe that idle fingers make empty minds. With vocational training, stagnation is not possible.

We divide the patients roughly into three groups when considering them for vocational training: (1) those in the higher age group, and statistics tell us that the percentage of this group is increasing every year; also those patients who fall below normal mentally; (2) those in a high enough educational level and/or income bracket so that they do not require rehabilitation and do not need any readjustment in their lives except moderation; (3) the group, which varies from 50 to 75 per cent, in which rehabilitation can play a definite part in the treatment of the disease and can tend to obviate the possibility of a reactivation of their tuberculosis.

The third group does and should occupy most of our time and effort. The other groups are given occupational therapy which later may be carried on at home as hobbies following their discharge. The sanatorium plan at present is to direct the main effort toward vocational training and to start it as soon as it is practical to do so, using as a guide the physical condition of the patient.

Vocational rehabilitation is not yet fully accepted by the medical profession as a part of its duty to see that the patient has obtained a self-supporting position following discharge from the sanatorium. The community itself has not yet been able to see how much money and time is lost to itself when rehabilitation is neglected. We feel that the time will come when all members of the community will see this problem in proper focus, and then we will be able to consider rehabilitation as a part of the treatment of the disease known as tuberculosis.



#### SIX MONTHS' REPORT

More than \$16,000,000 was paid to hospitals and doctors for services to Michigan Blue Cross and Blue Shield subscribers during the first six months of 1949, William S. McNary, executive vice president, Michigan Hospital Service, Detroit, has announced.

## Consideration of a Possible X-Factor in Treating Tuberculosis

By C. P. Mehas, M.D.  
Pontiac, Michigan

WE ARE ALL familiar with the tuberculous patient who followed the doctor's advice, took all forms of prescribed therapy, yet failed to respond to the treatment. Following pneumothorax, the disease would spread. When thoracoplasty was attempted, again the disease would spread. In other words, treatment usually effective would be of no avail. On the other hand, we are also familiar with the patient who refuses treatment, breaks all the established laws and still gets well.

Peculiar responses to tuberculosis have also been noted in mental hospitals. In some patients x-ray examinations have revealed that large cavities have closed for no apparent reason. Others with very treacherous disease have had x-ray clearing following an episode of excited, manic activity.

A high resistance to tuberculosis, even on close contact with active cases, also seems to defy analysis. A husband would be admitted with very far advanced, bilateral, cavernous disease and highly positive sputum. X-ray examination would indicate that the disease was of very long standing, yet the wife, in intimate contact with the husband for years, would have a negative x-ray and no evidence of tuberculosis. These peculiar reactions to tuberculosis have been attributed to resistance or immunity, a term which textbooks on the subject fail to define. The presence of this unknown X-factor has been confusing in evaluating the course of treatment to follow in tuberculosis.

Several years ago the modern concept of psychosomatic medicine was brought to our attention by the psychiatrist. Impressed with the psychosomatic phases as the cause of organic disease in other illnesses, we decided to investigate this phase as a possible X-factor to explain some of these peculiar and previously unexplained actions in tuberculosis. In seeking to better understand these strange responses it was hoped that a better treatment of the disease might be obtained.

Medical director, Oakland County Sanatorium, Pontiac, Michigan.



Two questions immediately faced us: (1) Can neurosis be induced? (2) Can a need for neurosis be developed?

Concerning the first question, we believe that "taking the cure" may induce neurosis in some individuals. The "cure" tends to reduce the size of the patient's world to the size of his bed. If the individual already has a latent neurosis, the "cure" may be bad for him, and thereby induce neurosis. Governed by the pleasure-pain principle, man learns to accept and adjust to pain in life and to his environment. When the necessity to adjust is transferred from the patient to his family and society, it is possible that the patient's character may be softened in the process. If his ability to accept and adjust to pain is weakened sufficiently, neurosis may be induced.

On the second question—can a need for neurosis be developed?—a statement by Dr. Menninger is relevant. In essence he stated that curing a neurosis was dependent on the patient's need for the neurosis as an escape. A man born of a loveless marriage, raised in a home without love, will be insecure and incapable of mature adjustment, and will need an escape. The escape, however, must be respectable. Early in life we learn that illness is a respectable escape and, unfortunately, an escape that is universally available to all. It is respectable because "it is not my fault." A need for illness may therefore be part of the explanation of psychosomatic illness.

A person may need illness as a means of dodging responsibility. This is illustrated by the child who develops an illness when faced with an unpleasant situation. Through string-pulling, a man may succeed in securing a position which proves to be too big for him. To escape responsibilities, and still retain his self-respect and the respect of those who helped him secure his position, he may develop symptoms of a bad heart. Similarly, a woman in menopause may exaggerate a time of normal difficulty to major proportions to avoid situations in life. Sometimes organic disease results from a poor psychology, and the effects of the disease are then utilized in an effort to escape from the problems of life. Gastric ulcer and spastic colon, for instance, can result from tensions and the inability to control situations according to one's desires and will. After the organic lesion has developed, the patient may use gastric pain as an excuse to the family to dodge unpleasant situations. Migraine headaches and trifacial pain, which may

have a psychosomatic etiology, might be used to control and dominate a family. Nutritional anemia and poor assimilation of food may possibly result from a deep subconscious desire to cease existing.

Thus, the X-factor may be:

1. A creation of neurotic need for illness, a need which may develop if the patient's ability to accept and adjust to life's problems is weakened through the effects of "taking the cure," which may possibly become an *in utero* stage, that is, the stage of perfect security.

2. Development of a need for tuberculosis as a means of security, or as explanation for one's failure in life or fear of life.

If a psychological need for tuberculosis exists, clearly no cure can be effected until the need for illness has been removed. Our thesis therefore may be stated as follows:

1. The patient's need for illness may offer a plausible explanation for a part of the phenomenon of psychomatic illness.

2. Resistance or immunity to tuberculosis may be affected by the X-factor or the need for organic illness.

Therefore, our problem is to remove the psychological need for tuberculosis. We do not believe that all persons who have tuberculosis have tuberculosis as a need. However, it is very difficult for personnel without special training to discover the individuals in whom the need for tuberculosis may be present. We therefore strongly recommend the addition of a psychiatrist to the sanatorium staff. This would accomplish two purposes. First, the psychiatrist could determine with each new case of tuberculosis whether the patient had a conflict that could result in a need for organic disease. Secondly, the psychiatrist would be extremely valuable in a program of rehabilitation to prevent the ex-patient from re-creating a need for illness, and a subsequent need to return to the sanatorium, which may possibly better explain the so-called "breakdown."

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#### WAIT SIX MONTHS FOR BEDS

In England, where socialized medicine is being experimented with, the average hospital patient waits six months for a bed. Tuberculosis patients wait nine months. That can happen here.

# Place of the Office of Vocational Rehabilitation in the Total Rehabilitation Program

By Katharine Post and Dorothy Arny  
Lansing, Michigan

THE PHRASE "rehabilitation of the tuberculous" suggests at once the goal toward which are aimed all the medical and auxiliary services marshalled for the care of the person with tuberculosis, and the complicated processes by which the tuberculous patient is restored to the fullest physical, medical, social, vocational and economic usefulness of which he is capable. Rehabilitation therefore has come to mean a comprehensive medical program involving all the skills and leadership of the medical profession combined with the skill of the adjunct profession to which the physician has had to delegate many of the responsibilities of a total medical program. Social service, occupational therapy, vocational counseling and other professional services, to an increasing degree, are being expected to share responsibilities of this comprehensive program. Public and private health and welfare agencies, tuberculosis sanatoria, and private physicians have primary responsibility for carrying out a full program of case-finding, treatment, and follow-up care. The lay public, through its many interested service groups and other organizations, is taking an increasingly active part in providing some of the services, materials, and equipment used in the rehabilitation process.

Since its establishment in 1920, the Office of Vocational Rehabilitation, Department of Public Instruction, has had its own responsibility as defined by law (Public Law 113) for the vocational rehabilitation of persons of employable age who are vocationally handicapped through physical or mental disability. Services available to such persons through Vocational Rehabilitation are guidance and counseling, medical diagnosis and treatment not available through other public or private resources, vocational training, and finally, assistance in job placement. In addition to the above, certain auxiliary services such as transportation, maintenance,

and supplies needed for training purposes are provided when they are required for attainment of the patient's vocational objective and when his own resources are insufficient to meet these needs.

From its beginning, Vocational Rehabilitation has served persons with a history of tuberculosis, and through the years Michigan has shown a constant growth in the numbers of the tuberculous rehabilitated. Until recent years, however, vocational rehabilitation was regarded as the last step in treatment and could not be undertaken until the disease was considered arrested. The agency's services to the tuberculous were limited to persons who were already outside the sanatoria or who, although still in the sanatoria, were ready for formal vocational training. Earlier, too, only those who would be returned to full remunerative employment were eligible for service. With current medical thinking, rehabilitation, in its broadest sense, has become an integral part of treatment, beginning with diagnosis and continuing throughout treatment and subsequent follow-up services. It is now fully recognized that because of the nature of the disease, the usually long treatment required, the constant threat of reactivation, the disruption of family life, interruption of employment and frequent vocational displacement, tuberculosis often creates many social, emotional, and economic problems that require solution before complete rehabilitation can be effected. It is also recognized that housewives stand high among the groups of persons having tuberculosis and especially high among those persons experiencing recurrence of the disease. Repeated readmissions of the housewife and mother creates many related health and social problems which have long complicated the task of tuberculosis control. Fortunately, through broadened legislation in 1943, Vocational Rehabilitation has been able to add housewives to those who may be eligible for assistance. Therefore, housewives, vocationally handicapped by tuberculosis, are now among those regularly served. Vocational Rehabilitation is thus keeping pace with recent advance in medical thinking by providing, or assisting in the provision of, numerous prevocational as well as vocational services which contribute to the ultimate recovery and vocational adjustment of the individual.

Since the services of Vocational Rehabilitation are intended to supplement other existing re-

Katharine Post is supervisor of Medical Services, O.V.R. Dorothy Arny is supervisor of Medical Social Service, O.V.R.



sources, the extent to which the official agency may be called upon for the provision of any services needed for the patient's vocational rehabilitation will vary with the particular sanatorium and other community facilities for meeting these needs.

Experts in the field of rehabilitation of the tuberculous have made varying estimates as to the proportion of tuberculous patients needing, and eligible for, rehabilitation service. Dr. Norvin C. Kiefer, Surgeon, Tuberculosis Control Division, United States Public Health Service, expresses the conviction that 100 per cent of tuberculous patients need rehabilitation, at least until exploration of their potentialities has demonstrated them to be unsuitable for such services; i.e., every person with a diagnosis of tuberculosis who is well enough to participate in counseling service should be given an opportunity to have his vocational problems considered. This view is held also by others in the field and expresses essentially the present basic principle of Vocational Rehabilitation in Michigan. Prevocational or other rehabilitation services beyond the period of initial evaluation are determined on the basis of individual need and the patient's medical readiness for such services.

The demonstration program of in-sanatorium prevocational service at Ingham County Sanatorium, described in the section, "The Voluntary Agency," led to recognition of the need for this type of service in all tuberculosis sanatoria. The Office of Vocational Rehabilitation co-operated with the state and local tuberculosis associations and sanatoria—in establishing prevocational services in fifteen sanatoria during 1947. Since then the services have been initiated in two additional sanatoria.

The total budget for this program in 1947-48 was \$108,000, of which approximately \$73,000 were Vocational Rehabilitation funds. The total budget for the current year is approximately \$200,000, of which \$100,000 will be provided by O.V.R. This doubling of the budget has made it possible to more nearly approach the goal of prevocational services for every sanatorium patient for whom this is recommended by the sanatorium director.

In 1946-47, the year the prevocational program began, 237 individuals with a history of tuberculosis were rehabilitated. During 1948-49, the total was 601, an approximate gain of 250 per cent. For many years, the total number of the tuberculous rehabilitated has been roughly 10 per cent of the total number of those with all dis-

abilities served by Vocational Rehabilitation. The 601 recorded in 1948-49 is 13.7 per cent of the 4,378 persons of all disabilities rehabilitated. This represents a definite gain in the relative place of the tuberculous in the rehabilitation program. The prevocational program which makes it possible to start the rehabilitation process, in the broad sense, at the time of diagnosis and offer constructive service throughout the period of sanatorium care, has been a significant factor in the increase in the number of tuberculous patients who have been rehabilitated through the services of Vocational Rehabilitation. More than 2,500 individuals with a history of tuberculosis are currently receiving services from Vocational Rehabilitation.

We have outlined the general program of Vocational Rehabilitation as it applies to needed services for the tuberculous. We have also reviewed the facts and figures in order to point out the progress which has been made in Vocational Rehabilitation services to the tuberculous and the increasing emphasis being placed on the needs of this disability group. This trend is in step with the philosophy and practice of physicians who have accepted the concept that effective treatment includes consideration of all of the factors in a patient's adjustment to, and recovery from, disease rather than treatment of the disease alone. Particularly in tuberculosis, the physician brings in the auxiliary members of his team so that the patient may become emotionally and economically as well as physically able to return to his place in the community.

The medical profession has been intimately concerned with each step aimed toward more effective control of tuberculosis. Although legal responsibility for case-finding, treatment and follow-up care, centers in the public sanatoria and health departments, a private physician is at some point either directly or indirectly concerned with every known tuberculosis case. Vocational Rehabilitation serves the tuberculous both in and outside the sanatoria. It depends upon the individual physician for guidance as to when and where its services may have a part in achievement of rehabilitation for his patients. It also depends upon the medical profession as a whole for stimulation and leadership in the development of the expanding program for rehabilitation of the tuberculous.

# The Voluntary Agency in Rehabilitation of the Tuberculous

By Roy R. Manty  
Lansing, Michigan

LESS THAN five years ago it was not possible to develop a complete rehabilitation plan for the individual disabled with pulmonary tuberculosis. Federal and state regulations in vocational rehabilitation prohibited assistance to cases with a positive sputum. At the same time many medical specialists would not approve the administration of rehabilitation projects with their patients until after discharge.

Representatives of both of these groups recognized that a great deal of valuable time was lost during hospitalization. There was an increasing demand for action against the problem of patients leaving the sanatoria without medical permission.

In 1940, the Michigan Tuberculosis Association, with the Ingham County Sanatorium, initiated the first in-sanatorium rehabilitation department. Very early after the patient's arrival he was given the opportunity to pursue diversional activities in arts and crafts and library and to participate in individual and group recreational functions. During this initial period the medical and nonmedical staff members, together, helped the patient become oriented to his new environment.

It was apparent that while patient morale could be improved through these extra-medical services, more was needed. Future insecurity was commonly expressed as a major fear of the patient. The introduction of counseling and social service proved to be a means of meeting this problem. The latter was directed towards helping meet the social and economic problems facing the patient and his family.

Within two years the Ingham program had demonstrated that rehabilitation could logically be regarded as a necessary part of treatment and care. One of the first objectives of the voluntary agency had been reached: to demonstrate the value of in-sanatorium rehabilitation programs to the medical and nursing staffs.

During this same period Michigan's Office of Vocational Rehabilitation was in close contact with the experiment in Lansing, for the post-sanatorium rehabilitation plans were their responsibility. The 1943 amendments to the Federal Vocational Rehabilitation Act (Public Law 113) provided a marked expansion of services to all disabled.

In 1947 the Michigan Office of Vocational Rehabilitation with the state and local tuberculosis associations and sanatoria, organized and initiated a state-wide plan for in-sanatorium rehabilitation services, patterned after the department at the programs, patterned after the department at the Ingham Sanatorium. During 1947, fifteen sanatoria adopted the plan which provided these services: vocational counseling, social service, occupational therapy, educational therapy, and recreational therapy. Budgets during this first year totaled \$108,655, of which \$35,000 came from Christmas Seal funds and the balance from the Office of Vocational Rehabilitation. The second year, with the same number of sanatoria participating, found budgets exceeding \$148,000, of which \$41,000 came from tuberculosis associations, \$26,400 from sanatoria and the balance from Vocational Rehabilitation. Financial reports for the current year show estimated expenditures for seventeen sanatoria now under the Michigan plan, of approximately \$200,000. Christmas Seal funds will exceed \$50,000, sanatoria will provide \$40,000, while Vocational Rehabilitation will expend over \$100,000. In addition, the Special Education Division, Department of Public Instruction, and the Homemaking Division, State Board of Control for Vocational Education, will contribute nearly \$50,000 during the year toward in-sanatorium educational projects in co-operation with local boards of education.

It is too early to measure, accurately, the contribution of these programs to the final adjustment of the individual with a history of tuberculosis. Local reports do show a reduction of walk-outs against medical advice and greater numbers being placed into suitable employment following satisfactory treatment. In this latter phase, sixty-three persons with a history of tuberculosis were listed as rehabilitated by Michigan's Office of Vocational Rehabilitation (returned to suitable employment) at the end of the fiscal year 1941-1942. The latest reports show that over

Patient Services Director, Michigan Tuberculosis Association.

(Continued on Page 1403)



## Community Participation in a Rehabilitation Program

Paul J. Kinville  
Marquette, Michigan

THE ULTIMATE goal of rehabilitation of the tuberculous, as of any handicapped person, is the best possible adjustment of that handicapped individual to community living. In order to make an attempt to meet this real need, an in-sanatorium rehabilitation service was organized by the Marquette County Tuberculosis Association and the Morgan Heights Sanatorium Board of Trustees, January, 1947. Services offered under the program were: vocational guidance, occupational therapy, and social service.

Expansion of the program was soon deemed necessary, especially in the men's workshop division, if needs of the patients were to be met. The budget for the rehabilitation program for the first year met only the preliminary stages of personnel planning and occupational and educational therapy. It was apparent that the help of every resident in Marquette County would be needed if adequate services were to be given by the sanatorium. This help could only be given through co-operative planning in meeting the problem. It was important that the taxpayer understand that rehabilitation cannot be left to experts, for there are no experts.

It was decided to seek such help first of all from service groups and civic clubs. The need was stressed by radio and personal talks before such groups. The importance of establishing a workshop was thus made known. It was pointed out that establishment of such a shop would afford Dr. James R. Acocks, sanatorium superintendent, an opportunity to test patient reaction to work during increasing periods of occupation and to judge their future employment capacity after they leave the sanatorium. Immediately recognizing the need of the program, the Marquette Kiwanis Club spearheaded the drive and gave impetus to the plan by equipping the workshop with the necessary power tools as a beginning. Members of the club felt that this project would definitely benefit the entire county. The Vocational Guidance Committee of the Kiwanis Club

sent letters to various firms and organizations in the county, explaining the need at Morgan Heights Sanatorium. Aided by excellent publicity by the *Marquette Daily Mining Journal*, the response was overwhelming.

The Marquette project was fortunate in having the co-operation and intense interest of this local newspaper whose prime interest has been community betterment. The first publicity consisted of a three-column spread headlined, "Good Workshop at Sanatorium Would Lighten Taxpayers' Load." Pictures were used along with the story. This was important because some people look at newspapers rather than read them. The pictures used told the story by themselves. One was of an empty room and the other was of that same room equipped with power tools and operated by a group of patients.

The Extension Homemakers Clubs of the County also adopted the Morgan Heights Sanatorium Program as a project for the year. Money for the purchase of tools, yarn, and materials for occupational therapy began pouring in as a result of their interest. Donations were received from choral groups, church service groups, veterans organizations and fraternal clubs, as well as from many individual citizens. Every hardware store in the county made a contribution of hand tools and equipment. As a result of such wholehearted community effort, the workshop program was soon a completed project. A complete woodshop and machine shop is now an essential part of the rehabilitation program.

Here was an outstanding demonstration that community organizations can and will work with the sanatorium when the need is apparent. Assuming that rehabilitation is a community responsibility, the program will continue to flourish if it has community backing. If adequate appropriations for rehabilitation are to be received, it must be made evident to the public that it is good business to have a tax consumer become a taxpayer.

==MSMS==

Director, Patient Services Department, Morgan Heights Sanatorium, Marquette, Michigan.

# Tuberculosis Causality

By Iago Galdston, M.D.

New York, New York

WITHOUT the tubercle bacillus, tuberculosis is not possible. But tuberculosis is not *caused* by the tubercle bacillus.

These dicta, though seemingly paradoxical, embrace most of the essentials in the etiology and therapy of clinical tuberculosis. They touch upon an ancient wisdom, yet one which needs to be reaffirmed for each new generation of physicians.

The causation of tuberculosis is an intricate process involving many factors, and the treatment of tuberculosis is a process no less intricate and many-factored.

Something of this is reflected in Osler's well-known paraphrase of the Parable of the Sower. Osler thuswise endeavored to emphasize the significance of "the soil," i.e., the condition of the body, in the etiology of clinical tuberculosis. He quoted with approval Baldwin's generalization that the adult human individual *in normal health* seems to be practically immune to natural infection. Osler might have expanded upon Baldwin's generalization to the effect that the tuberculous individual is not likely to recover, nor to remain recovered, unless and until he is brought back to normal health.

The tuberculous individual generally has more than his tuberculosis the matter with him, and the therapist who fails to recognize and to deal adequately with those other matters is likely to fail in his efforts. Yet these other matters are not always patent, or being so, are not likely to be the most important. Be that as it may, the good therapist must look beyond the obvious. He must look to the patient's personality no less than to his person, for the tuberculous individual is more than likely an "odd fellow," that is, one who is different from the common run of man at least in some respects. The Ancients spoke of the tuberculous "habitus, disposition, diathesis, dyscrasia, temperament, or constitution." It is not at this juncture pertinent to establish what the Ancients did intend by these terms. It is sufficient to observe that they, too, recognized the tuberculosis sufferer as one likely to be an odd

fellow. The good therapist must take the patient's "oddities" into account.

The recent resurgence of psychosomatic medicine has brought in its wake a host of typological criteria, most of them of rather dubious worth and validity. It is all too common now to hear of "the ulcer type," "the migraine type," "the hypertensive type," et cetera. The emphasis here placed on the "oddity" of the tuberculosis patient is no prelude to the proponement of a tuberculosis type. Beside, that would be hardly original. In the days before the x-ray and the laboratory made the diagnosis of tuberculosis easy and certain, it was observed that the "long thin-chested, and asthenic" individuals were more common among the phthisis sufferers. The deep-chested, short, stocky ones, when "troubled in their lungs," were more likely to be diagnosed as bronchitic.

The oddity of the tuberculosis patient is not reflected in his constitutional type, but more likely in his personality, in his psychological configuration. And even here one finds no prototype. Both noble genius and the most degraded denizen of the depths can and do suffer from tuberculosis. That which is common to both is a measure of being at odds with the world, a certain unwillingness, or incompetence, or both, to meet with and to deal effectively with reality.

There is nothing opprobrious or condemnable in this being at odds with the world. The oddness of the tuberculosis patient is no stigma. It is here merely given as a datum, from which the following is drawn as logical sequentia. Insofar as the psychological configuration contributes to the development of the tuberculosis and impedes recovery, the therapist must recognize its existence and its dynamics. He must likewise be competent and willing to deal with it.

All of this does not imply that the physician treating tuberculosis needs among other things to be a psychiatrist. He should, however, be alert to the emotional and psychological needs and problems of his patients, should deal with them to the best of his enlightened competences,\* and when these do not prove adequate, should not hesitate to call upon the psychiatric specialist. The poets, dramatists, and novelists have long recognized that the tuberculous individual is no less a psychiatric than a clinical "case." This recognition in medicine is long overdue.

\*The psychiatric social worker will in these connections prove a fine ally.



# Fourth Annual

## MICHIGAN POSTGRADUATE CLINICAL INSTITUTE

Grand Ballroom, Book-Cadillac Hotel, Detroit

March 8-9-10, 1950

Time	Wednesday March 8, 1950	Thursday March 9, 1950	Friday March 10, 1950
A.M. 8:30- 9:00	Registration Exhibits Open	Registration Exhibits Open	Registration Exhibits Open
9:00- 9:20	Surgery GEORGE CRILE, JR., M.D. Cleveland, Ohio	Medicine WALTER C. ALVAREZ, M.D. Rochester, Minn.	General Practice RICHARD H. FREYBERG, M.D. New York City
9:20- 9:40	Gynecology-Obstetrics J. MASON HUNDLEY, JR., M.D. Baltimore, Md.	General Practice ROY D. McCLURE, M.D. Detroit	Industrial Surgery J. DUANE MILLER, M.D. Grand Rapids
9:40-10:00	Pediatrics ROCKWELL M. KEMPTON, M.D. Saginaw	Obstetrics PALMER E. SUTTON, M.D. Royal Oak	Obstetrics ROBERT B. KENNEDY, M.D. Detroit
10:00-11:00	Intermission to View Exhibits	Intermission to View Exhibits	Intermission to View Exhibits
11:00-11:20	Medicine JEROME W. CONN, M.D. Ann Arbor	Anesthesia JOE DePREE, M.D. Grand Rapids	Pediatrics JULIAN P. PRICE, M.D. Florence, S. C.
11:20-11:40	Orthopedics HERBERT W. HARRIS, M.D. Lansing	Surgery E. THURSTON THIEME, M.D. Ann Arbor	Urology REED M. NESBIT, M.D. Ann Arbor
11:40-12:00	Allergy HOMER A. HOWES, M.D. Detroit	Medicine MARION A. BLANKENHORN, M.D. Cincinnati, Ohio	Medicine HENRY L. SMITH, M.D. Detroit
P.M. 12:00- 2:00	Luncheon LEO G. RIGLER, M.D. Minneapolis, Minn.	Luncheon PLINN F. MORSE, M.D. Detroit R. S. Sykes Lecture	Luncheon ISADORE SNAPPER, M.D. New York City
2:00- 2:20	Dermatology-Syphilology FRANCIS E. SENEAR, M.D. Chicago, Ill.	Psychiatry FRANZ G. ALEXANDER, M.D. Chicago, Ill.	Surgery WALTMAN WALTERS, M.D. Rochester, Minn.
2:20- 2:40	Medicine Speaker To be Announced	Pediatrics A. MORGAN HILL, M.D. Grand Rapids	Medicine GORDON B. MYERS, M.D. Detroit
2:40- 3:00	Public Health FRANKLIN H. TOP, M.D. Detroit	Otolaryngology JAMES H. MAXWELL, M.D. Ann Arbor	Gynecology F. BAYARD CARTER, M.D. Durham, N. C.
3:00- 4:00	Intermission to View Exhibits	Intermission to View Exhibits	3:00-3:30 Final Intermission to View Exhibits
4:00- 4:20	Surgery WILLIAM S. CARPENTER, M.D. Detroit	Ophthalmology WM. L. BENEDICT, M.D. Rochester, Minn.	3:30-4:00 Surgery FREDERICK A. COLLIER, M.D. Ann Arbor
4:20- 5:00	Discussion Conference on Cancer Pathology C. I. OWEN, M.D., Detroit Moderator X-Ray LEO G. RIGLER, M.D. Minneapolis, Minn. Surgery GEORGE CRILE, JR., M.D. Cleveland, Ohio Gynecology J. MASON HUNDLEY, JR., M.D. Baltimore, Md. Dermatology KENNETH B. MOORE, M.D. Flint Hematology A. HAZEN PRICE, M.D. Detroit Syphilology FRANCIS E. SENEAR, M.D. Chicago, Ill.	Clinical Pathological Conference Moderator S. E. GOULD, M.D. Eloise Surgery DARRELL A. CAMPBELL, M.D. Ann Arbor Internal Medicine MILTON R. WEED, M.D. Dearborn	4:00-5:00 Quiz Period with Friday's Guest Essayists FREDERICK A. COLLIER, M.D. Ann Arbor Moderator
6:30	Dinner Hour	Dinner Hour	Institute Ends at 5:00 P.M.
9:00 to 12:00 midnight	Entertainment for All Registrants and Their Ladies Grand Ballroom Book-Cadillac Hotel Detroit	No Program Thursday Evening	No Registration Fee at the Postgraduate Institute
			First Annual HEART DAY Saturday, March 11, 1950

## A Brazen Political Potential

Today, more than ever before, attention is focused on the relationship between the medical profession and the general public. It is correspondingly important that our viewpoint be squarely presented to all. As members of a profession grounded in the highest ideals, we have much of which to be proud and nothing to conceal. However, public relations facilities of the State Societies alone are insufficient, and the MSMS has already supplemented them in one instance by co-ordinating the efforts of every doctor's family in behalf of the CAP Program. But the doctor himself, thoroughly acquainted with medical standards and contributions to the public welfare, must seize every opportunity to explain personally medical programs and progress and to combat medico-political schemes.

The doctor who does actively engage in public relations activities will find a surprisingly large number of allies. The political goals of the national administration have not been entirely overlooked, and many citizens will vigorously oppose political entrenchment and oppression in any form. But the doctor must remember that his audience is more interested in the effect of governmental control on public welfare generally than in its incidental effect on the individual doctor.

Not all the objectives of governmental attempts at medical control are obvious. Among those less publicized aspects, it is worth noting that factual-legal basis for the Attorney General's recent anti-trust action against a medical society was so lacking that those prosecuting the suit could have had slight hope of winning. The apparent objective was intimidation of medical organizations. Of more immediate interest, the objective of the proposed Wagner-Murray-Dingell bill, offered to the National Legislature this year as a cornerstone of the "Fair Deal," may not be merely control of the medical profession for itself; rather, the bill would help to create a Federal Administrative Bureau controlling the most potent of political gifts, free medical services and old age pensions. This enticing package would be directed by a political appointee of Cabinet rank and a centrally controlled organization of political appointees extending into every county in the nation. The political potential in such schemes is as astounding as the schemes are brazen—try them out on proponents of the "Welfare State" whom you chance to meet.

*W.E. Barstow MD*

President, Michigan State Medical Society

*President's*



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# Editorial

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## TUBERCULOSIS

**T**UBERCULOSIS, for many ages, has been one of the greatest scourges of the human race. Study of the disease and of methods of care and prevention have stimulated the medical mind. One of the first standing committees of the Michigan State Medical Society was that devoted to tuberculosis.

Next after those for mental diseases, hospitals for the care of tuberculosis were the earliest for specific disease. Medical societies were developed with this particular objective. Our own State Medical Society was early in the field, and through its efforts a State Health Department was established.

Studies and activities through the years, always with the objective of lessening or preventing this disease, have placed the death rate far down the list at the present time. Our active committee work, and the established Christmas Seal to accumulate money for relief of tuberculosis, are indications of the extent medical and public interest has been aroused.

In the old days when our tuberculosis sanatoria were first established, the cottage plan was prevalent. Many persons, in building new homes in the first of this century, established fresh-air or even out-door sleeping quarters with the belief that this would guard against tuberculosis. But progress has been made, infection has been lessened, and death rates and morbidity have decreased. We even have many so-called "arrested cases" which in the older days were an unknown outcome.

With such a crying need for tuberculosis hospitals and tuberculosis instruction at our medical universities, it is a shame that our government has seen fit to build a mammoth general Veterans Administration hospital at Ann Arbor, instead of having supplied what the university could well have used and what our state so badly needs—a tuberculosis hospital. The Medical Society proposed this measure at the time the Veterans Administration hospital was being considered, but was completely ignored.

The Michigan State Medical Society is dedicating this number of *THE JOURNAL* to the subject of tuberculosis and its control.

## IS YOUR HOSPITAL SPREADING TUBERCULOSIS?

**T**HE MATERIAL for this issue of *THE JOURNAL* had all been gathered, the papers written, and the editorial announcement formulated when the great metropolitan newspapers published a full-page advertisement with the heading, **IS YOUR HOSPITAL SPREADING TUBERCULOSIS?** This heading introduced the announcement that the *Woman's Home Companion* for October carried an article by Albert Q. Maisel asking this question. His story starts:

"Mrs. J. S. is a patient in a tuberculosis sanitarium. It will be three years before she can return to her family. Johnny, the oldest boy, is boarded with relatives. The twins are at home, cared for—until Mr. S. returns from work—by a part-time household helper, aged fourteen.

"But the new baby, the S. family so joyously welcomed a year ago, is dead. Needless to say, of the same disease that sent Mrs. S. into exile and ruined the lives of the entire S. family. Shocking? Yes. But even more shocking to realize—it could happen to you if you too believed, as Mr. and Mrs. S. did, that good hospitals do everything science knows how to protect their patients' health.

"Mrs. S. went to a good hospital to have her fourth baby. She was given a routine physical examination, a blood count, a urinalysis and a blood serology test. But *not* a chest x-ray, although it would have cost no more than fifty-five cents. And the hospital didn't x-ray the woman in the bed beside her, either.

"That woman had tuberculosis. Innocently and unconsciously she transmitted her disease to Mrs. S. (whose previous medical record showed no tuberculosis), and thus to the baby. That woman could have been the woman next to you when you entered your hospital for treatment."

This is a well-written article and should be read by every doctor and by every hospital administrator, but we question the advisability of spreading or broadcasting it until the hospitals have had a chance to install this additional service. For many years the medical profession has advocated the taking of chest radiographs for all patients who enter our hospitals. Miniature x-ray machines have been developed and are available in many instances for taking these radiographs. These machines are used mostly in public health control or are being used by special societies such as the anti-tuberculosis societies. In the hospitals it is cus-

tomy to take these radiographs on larger films. This is done in most of our large hospitals and in a good many of the smaller ones.

### PROPAGANDA—OR INSULT?

ON SEVERAL occasions we have been impelled to invite attention to what seemed a studied program to place the medical profession in a poor light before the public, with the possible excuse of furthering the efforts of the Social Change artists who are bent on establishing political medicine in our midst in spite of our best efforts. In the article mentioned above, Mr. Maisel cannot resist, and the *Woman's Home Companion* magazine failed to suppress, an unwarranted insult to the hospitals and the medical profession. *"If our laggard hospitals cannot decry the effectiveness of routine chest x-rays, if they cannot alibi on the grounds of expense, why do more than 4,000 still fail to provide this service?"* Then follows, *"In most, the failure has no justification whatsoever. IT EXISTS ONLY BECAUSE MEDICAL PRACTICE SELDOM KEEPS PACE WITH THE ADVANCES IN MEDICAL SCIENCE, UNLESS THE PUBLIC DEMANDS THE BEST."*

We consider this a downright insult, and we believe that the publishing magazine has some responsibility. If this statement, which we have capitalized, were true, World War II would have been lost because of medical and health problems insurmountable without the knowledge of advances of medical science. The very x-rays which Maisel urges would be unknown without the same use by the medical profession of the advance in medical science. It has been the function of the medical profession to make use of every advance known which will benefit our patients. However, it is also our duty to double check reported scientific advancements until they have become evaluated. They are then taken up with amazing rapidity. Mr. Maisel and the *Woman's Home Companion* would have accomplished just as much and left a much better taste by using more temperate and accurate language.

### GOVERNMENT PRESSURE

A YEAR AGO, on October 19, 1948, the Justice Department of the Government announced an antitrust action against the Oregon State Medical Society and others, on account of the activities in the Oregon Physicians' Service, charging conspiracy. In the June, 1949, number of

THE JOURNAL we used the following two paragraphs, pages 740 and 758:

"Some months ago we reported the suit against the Oregon State Medical Society and the Oregon Physicians' Service under the Sherman Antitrust Law, charging restraint of trade. We have been informed that other medical societies are being investigated, and at the Blue Cross-Blue Shield Conference in Hollywood Beach, Florida, the report was made that the FBI men came into the Chicago Medical Society office, demanding their books for the past six years.

"Has the government used its power of persecution to restrain official medical society support of the voluntary nonprofit health care plans, so that Oscar Ewing's pronouncement that they are inadequate to care for the American people may seem well founded?"

This was recalled when the radio announcement came from Detroit on Wednesday, October 5, 1949, at 7:00 p.m. that the officials of the FBI had been investigating accounts of the doctors and the Michigan Medical Service, and had demanded to see some of the books.

The press has been unfavorable in the stories published following the FBI investigations, both in our Lansing and our Detroit offices. The man in Lansing is going over committee meetings and minutes of the Council and the Executive Committee back to 1935. The impelling force that directs this extreme investigation of private business can only be understood in the light of what these forces are doing and have been doing over a period of years.

Michigan Medical Service has nothing to conceal and no fears that government may bring suit, but with the previous action in Oregon anything may happen if it tends to discredit the medical profession and its activities in serving the medical public.

### MICHIGAN MEDICAL SERVICE

THE HOUSE of Delegates, at its annual meeting in September, instructed the officers of Michigan Medical Service to establish an entirely new service for the subscribers. The service certificates now in force and based upon the theory that \$2,500 is a living wage as it was in 1939 are to be continued and will be serviced by the membership as a partial indemnity program, the same as they have been in the past few years. But a new policy is to be written with an income level of \$5,000. This policy will carry many more benefits, and

(Continued on Page 1420)



# Annual Session Echoes

## ATTENDANCE RECORDS

Attendance records for Grand Rapids were broken at the 84th Annual Session of the Michigan State Medical Society, September 21-22-23, 1949!

A total of 2,329 registered last autumn in Grand Rapids—219 more than the registration of 1947.

The breakdown of the 1949 registration was as follows:

Doctors of Medicine .....	1,587
Guests .....	395
Exhibitors .....	347
Total attendance .....	2,329

Grand Rapids registrations in previous years were as follows: 1947—2,110; 1944—1,449; 1942—1,746; 1941—2,117; 1939—1,810; 1937—1,894.

## TOP COVERAGE BY PRESS

Attendance records weren't the only records broken on the occasion of the recent 84th Annual Session and Postgraduate Conference for each day's mail brings additional clippings testifying to the generosity of the free press of Michigan as they covered the four-day meeting with story and picture.



C. E. UMPHREY, M.D., Detroit, President-Elect

The newspapers and radio stations of Michigan began their presentation of the MSMS annual meeting back in July when the initial release was mailed to more than 400 papers. From the date of the first release until the session officially opened,



O. O. BECK, M.D., Birmingham, Chairman of the Council, and W. E. BARSTOW, M.D., St. Louis, President

more than 2,470 separate releases were made to state newspapers and periodicals. In addition to these stories from the Public Relations office many feature articles were written and placed in leading papers.

During the House of Delegates meeting and the Postgraduate Conference, the newspapers of Grand Rapids and Detroit, as well as the wire services, were more than co-operative. Although co-operation with members of the press is not necessarily judged by the stories which are printed, it is only fair to state that never before has an Annual Session of the MSMS received such widespread, efficient coverage.

The year 1949 marked the first year that the newspapers of metropolitan Detroit assigned their top science-feature writers to cover the medical proceedings of a meeting not held in Detroit. Especial thanks are due Jack Pickering, *Detroit Times*, Robert Goldman, *Detroit Free Press* and Allen Schoenfield, *Detroit News*, for their excellent reporting of the newsworthy events of this meeting.

The newspapers of Grand Rapids also deserve a "special orchid" for their exceptional attention to all the session gatherings. It being hard to single out individuals, mention should be made of the work of Z. Z. Lydens, *Grand Rapids Press* and writers Voss, Murphy and Gerald of the *Grand Rapids Herald*.

The Grand Rapids papers were exceedingly generous with photographs, as more than a dozen events were portrayed to the reading audience via pictures.

It would be difficult to state which meeting or



THE NEW COUNCIL—MICHIGAN STATE MEDICAL SOCIETY

(Seated, left to right) R. H. Baker, M.D., Pontiac, Speaker of the House of Delegates; R. J. Hubbell, M.D., Kalamazoo, Vice-Chairman of The Council; W. E. Barstow, M.D., St. Louis, President; O. O. Beck, M.D., Birmingham, Chairman of The Council; C. E. Umphrey, M.D., Detroit, President-Elect; L. Fernald Foster, M.D., Bay City, Secretary; and A. S. Brunk, M.D., Detroit, Treasurer.

(Standing, left to right) Councilors R. C. Pochert, M.D., Owosso, 6th District; William Bromme, M.D., Detroit, 18th District; W. S. Jones, M.D., Menominee, 13th District; Wilfrid Haughey, M.D., Battle Creek, 3rd District and Editor; E. A. Oakes, M.D., Manistee, 9th District; Fred Drummond, M.D., Kawkawlin, 10th District; E. A. Osius, M.D., Detroit, 16th District; A. H. Miller, M.D., Gladstone, 12th District; L. C. Harvie, M.D., Saginaw, 8th District; J. S. DeTar, M.D., Milan, 14th District; D. W. Myers, M.D., Ann Arbor, Retiring Councilor, 14th District; P. A. Riley, M.D., Jackson, 2nd District; W. B. Harm, M.D., Detroit, 17th District; L. W. Hull, M.D., Detroit, 1st District; H. B. Zemmer, M.D., Lapeer, 7th District; and J. D. Miller, M.D., Grand Rapids, 5th District.

Absent: Councilor C. A. Paukstis, M.D., Ludington, 11th District and Immediate Past President, E. F. Sladek, M.D., Traverse City.

lecture received the most widespread attention—for the entire meeting made interesting copy.

### FIFTY-YEAR CLUB ADDS SEVENTEEN

The ranks of the Michigan State Medical Society's "Fifty-Year Club," founded in 1947 for the purpose of paying honor to those physicians who have practiced medicine for half a century or longer, was swelled by seventeen new members during the Officer Night ceremonies of the Annual Session, September 21.

The addition of the Class of 1949 brings the total number of Michigan practitioners in the "Fifty-Year Club" to 126.

The longest service represented by the members added this September is claimed by William G. Wight, M.D., Yale, Michigan, who started practice in 1890. Other longtimers are F. C. Dunn, M.D., Lansing, who graduated from medical school in 1892, and W. E. Colbath, M.D., who began practice in 1893.

Other Michigan doctors who received the golden pins emblematical of membership in the "Fifty-Year Club" from E. F. Sladek, M.D., President were: Dean W. Myers, M.D., Ann Arbor, Walter D. Ford, M.D., Detroit, Carl Fettig, M.D., Detroit, Louis J. Hirschman, M.D., Detroit, Robert J.

Palmer, M.D., Detroit, Williard Monfort, M.D., Highland Park, L. W. Oliphant, M.D., Ann Arbor, Frederick W. Brown, Watervliet, W. J. Wright, M.D., Ypsilanti, Frank A. Grawn, M.D., Ypsilanti, E. A. Martindale, M.D., Hillsdale, I. L. Spalding, M.D., Hudson, W. G. Hutchinson, M.D., Bloomfield Hills, and Newton H. Greenman, M.D., Decatur, Michigan.

### What They Thought of the 1949 MSMS Annual Session

*Herbert Acuff, M.D., Knoxville, Tenn.* (Biddle Oration): "I want to express my appreciation to you for the opportunity of visiting the Michigan State Medical Society last week, and the great honor conferred upon me by inviting me to deliver the Biddle Oration in Medicine.

"I have been in most of the medical societies of the United States, and never have I seen one run so smoothly and efficiently as Michigan does.

"I have long heard of the cordiality and efficiency of the Michigan State Medical Society and now know firsthand that it is one of the best in the nation. I appreciate very much the honor to deliver the Biddle Oration and to have the opportunity of meeting many of your fine men in Michigan.

"It was a great privilege to be among you, and I sincerely trust that I shall have the opportunity some day to repay in kind the many courtesies you have extended to me. This will be done if you will only visit us in Knoxville."

\* \* \*

*Harry E. Bacon, M.D., Philadelphia* (Guest Essayist): "I want you to know how much I appreciate the courtesy accorded me and particularly by you personally on the





MSMS OFFICERS FROM WAYNE COUNTY AT ANNUAL SESSION

(Left to right) A. S. Brunk, M.D., Detroit, MSMS Treasurer; L. W. Hull, M.D., Detroit, Councilor, 1st District (Standing); E. A. Osius, M.D., Detroit, Councilor, 16th District; P. L. Ledwidge, M.D., Detroit, Immediate Past President; William Bromme, M.D., Detroit, Councilor, 18th District (Standing); and W. B. Harm, M.D., Detroit, Councilor, 17th District.

Absent: C. E. Humphrey, M.D., Detroit, new President-Elect.

occasion of the meeting last week. Your kindness is greatly appreciated.

"It was a full meeting and I certainly thank you for all that you did in my behalf."

\* \* \*

Joseph L. Baer, M.D., Chicago (Guest Essayist): "I must compliment you on the smoothness with which your organization functioned. I enjoyed meeting many old friends and my 'ubiquitous host' was just that."

\* \* \*

W. B. Castle, M.D., Boston (Guest Essayist): "I had a very pleasant experience in attending the Michigan State Medical Society Annual Session in Grand Rapids. It was a splendid scientific program."

\* \* \*

Arthur R. Colwell, M.D., Evanston, Ill. (Guest Essayist): "I enjoyed my appearance before the Michigan State Medical Society and the friendliness of those that I met. Mrs. Colwell and I greatly appreciated your hospitality which helped to make our stay in Grand Rapids very enjoyable."

\* \* \*

Wm. J. Dieckmann, M.D., Chicago (Guest Essayist): "The flowers and basket of fruit were something new in my experience of speaking before societies. Thank you very much for them. I think it was very thoughtful."

\* \* \*

Frederick H. Falls, M.D., Chicago (Guest Essayist): "It was indeed a pleasure to take part in your splendidly organized meeting. Your members were most gracious and solicitous of my comfort. You are to be congratulated on the fine meeting which, in my opinion, was the best run State Society meeting I have ever attended."

\* \* \*

John E. Gordon, M.D., Boston (Guest Essayist): "It was a great pleasure to meet you in Grand Rapids and to renew our association of other years. I was impressed with the general quality of your program and with the interest manifested by those in attendance.

"In all fairness, however, I have seen other equally good meetings, but never, in a long history of campaigning on the medical circuit, have I experienced such hospitality and personal courtesies as were extended by the Michigan State Medical Society. I am not alone in that

opinion, for I heard it voiced by others of your guest speakers. If you should have future difficulty in making up a program, which I doubt, I shall be pleased to add my endorsement to the invitation to any speaker to your meetings. He shouldn't miss them."

\* \* \*

Robert E. Gross, M.D., Boston (Guest Essayist): "I want to express to you my feeling of gratitude for the very gracious way in which I was cared for during my recent visit to Grand Rapids, to partake in the State Medical Society meeting. It turned out to be an exceedingly pleasant occasion for me and I am glad that



TWO NEW COUNCILORS

J. S. DeTar, M.D., Milan, Councilor, 14th District (left); L. W. Hull, M.D., Detroit, Councilor 1st District.

I had the opportunity to visit with so many members of the Society."

\* \* \*

Arnold S. Jackson, M.D., Madison, Wis. (Guest Essayist): "This is just a short note to tell you how much I enjoyed your annual meeting and the opportunity of meeting you and so many of my old friends again. It was a splendid meeting, the finest state meeting I have ever attended. Congratulations are certainly due you."

\* \* \*

Robert L. Jackson, M.D., Iowa City, Iowa (Guest Essayist): "It was a pleasure and an honor to be a guest speaker at the Michigan State Medical Society. I had a grand time in Grand Rapids and I want to assure you that I was well taken care of by Dr. Dick as well as other members of the Society."

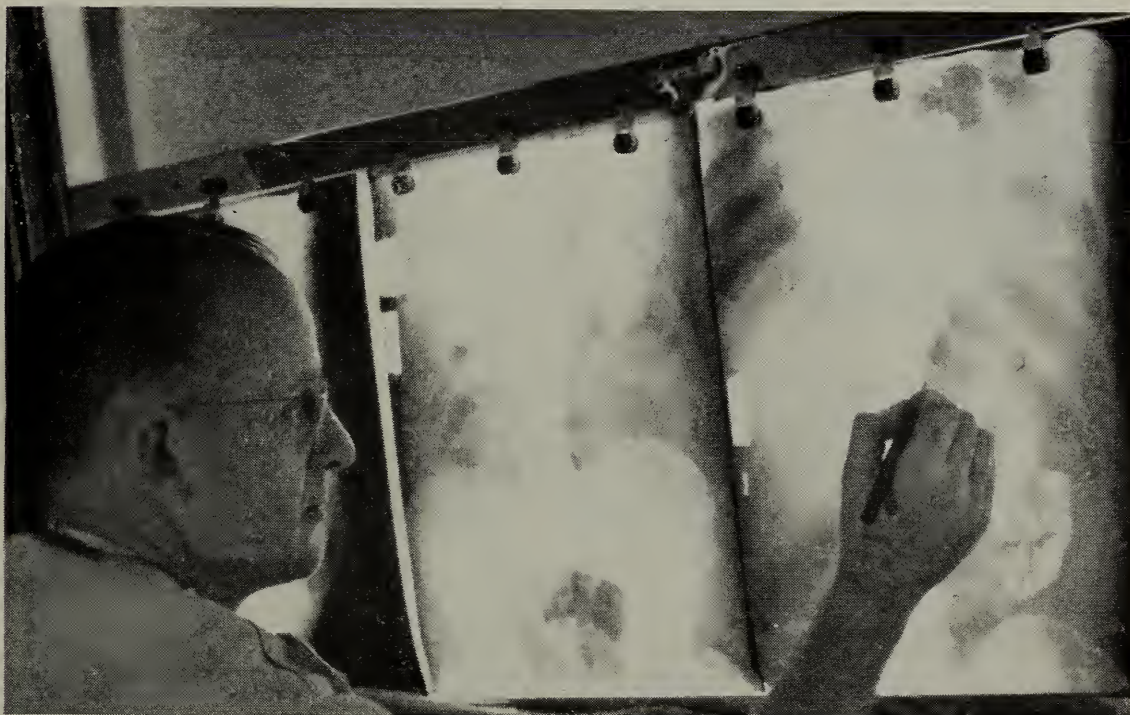
(Continued on Page 1400)

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(Continued from Page 1398)

Herbert C. Miller, M.D., Kansas City, Kans. (Guest Essayist): "I had a very enjoyable time and wish to express my appreciation of the hospitality shown to me."

\* \* \*

J. E. Moore, M.D., Baltimore (Guest Essayist): "I greatly enjoyed the meeting of the Michigan State Medical Society in Grand Rapids and want to thank you for the opportunity of attending. My local sponsor, Dr. Ralph, showed me the utmost courtesy and hospitality."

\* \* \*

Earl D. Osborne, M.D., Buffalo, N. Y. (Guest Essayist): "Needless to say, I enjoyed my attendance at the meeting and met four of my old classmates and quite a number of other men whom I have known for some time. I am heartily in favor of the type of meeting which you put on for the benefit of the doctors in the State of Michigan."

\* \* \*

Dallas B. Phemister, M.D., Chicago (Guest Essayist): "It was a pleasure and an honor to participate in the meeting of the Michigan State Medical Society."

\* \* \*

E. C. Reifstein, Jr., M.D., New York (Guest Essayist): "I cannot begin to thank you enough, and, through you, the committee and members of the Michigan State Medical Society for the many courtesies you extended to me during my recent visit to Grand Rapids to participate in the annual convention. I have never been anywhere where I have been made to feel more at home, and where I have been looked after so well. I certainly came away much impressed with the activities of the Michigan group. It was certainly a great pleasure to be with your group. I am sorry that I could not have spent more time, and I look forward greatly to the occasion when I will have a chance again to visit all of the fine people of Michigan."

\* \* \*

Ralph O. Rychener, M.D., Memphis (Guest Essayist): "My trip to Grand Rapids was very pleasant, and although your boys worked me pretty hard (four separate appearances in one day) I did meet a lot of my old friends and had a very enjoyable trip."

\* \* \*

Max Thorek, M.D., Chicago (Guest Essayist): "It was a great pleasure and joy to be with you at the Michigan State Medical Society meeting. I can assure you that the warmth of your hospitality and that of your personal friendship were an inspiration."

\* \* \*

John M. Waugh, M.D., Rochester, Minn. (Guest Essayist): "Thank you very much for the royal reception which was given me in Grand Rapids. I assure you I enjoyed my short stay very much and was extremely sorry I could not be with you for the entire meeting. Dr. George Fahlund took good care of me and I enjoyed the discussion conference with Doctors Collier and Phemister. I would like to congratulate you and your colleagues for the fine meeting, as it was one of the best medical meetings I have ever attended."

\* \* \*

Warren E. Wheeler, M.D., Columbus, Ohio (Guest Essayist): "I would not want to let this occasion pass without expressing my appreciation for your system of ubiquitous hosts. I have never before had the occasion to experience such a system, but it is certainly the most effective arrangement for the speaker's comfort and pleasure that I have known. I can see where the system would work best only when the hosts were extremely gracious folks, and I am sure my good impression stems mainly from the fact that Dr. Hill took such fine care of me and my wife during our stay. All in all, my trip was a most pleasant one and my reception at the meetings was extremely gratifying."

\* \* \*

(Continued on Page 1402)

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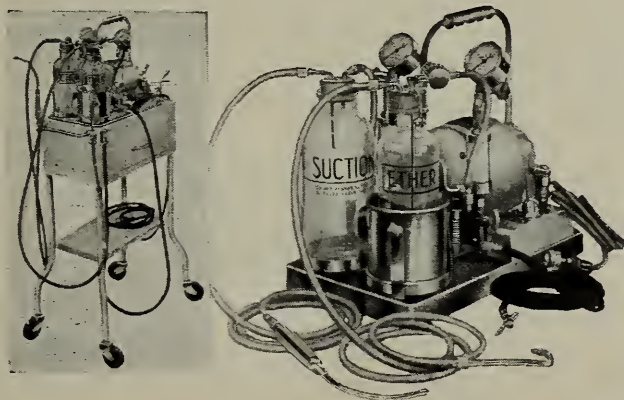
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(Continued from Page 1400)

*Norman F. Miller, M.D., Ann Arbor (Discussion Conference Leader):* "Let me say that I think you did a swell job with the meeting. I thought the arrangements were excellent, including the combining of the scientific and technical exhibits."

\* \* \*

*John M. Dorsey, M.D., Detroit:* "Hearty greetings! We certainly had a wonderful meeting and I am grateful to you for your helpfulness in setting it up so well. All of us members of the State Medical Society appreciate the wonderful work that you have been doing for us."

\* \* \*

*Wm. J. Butler, M.D., Grand Rapids:* "The meeting was certainly a huge success and I wish to congratulate you again on the excellent management of same."

\* \* \*

*Fritz W. Bramigk, M.D., Detroit:* "That was a fine meeting. May I suggest simplified exhibition of physicians' hobbies in their special field of practice of medicine, including the practitioners out in the field."

\* \* \*

*Homer D. Strong, Head of Alumni Affairs, Wayne University, Detroit:* "You certainly have a friendly and efficient organization."

\* \* \*

*A. Grant Clarke, New York, President, Medical Exhibitors Association (Camel Cigarettes):* "I want to thank you for the cordial hospitality you showed me during my visit to Grand Rapids last week. Please extend my thanks to the Michigan State Medical Society and tell them that I know no better place to visit than their meeting. I did enjoy myself completely and can remember nothing more pleasant than the cordial hospitality I found at Grand Rapids and also in Detroit last year."

*S. A. Montgomery, Gerber Products Company (Exhibitor):* "Thanks a million for your many favors, I look forward to seeing you in the not too distant future."

\* \* \*

*M. M. Ricketts, Merck & Co. (Exhibitor):* "The meeting in Grand Rapids was again one of the best that I have seen. It certainly is too bad that men who are interested in similar ventures all over the country can't drop in incognito to one of your sessions and learn all of the things that they wish they knew."

\* \* \*

*O. B. Newton, Jr., C. B. Fleet Co. (Exhibitor):* "If we got the same treatment from the guys that run all other conventions I don't think the other conventions would ever have an unsold space. We are today posting the dates on our 1950 convention calendar and will certainly plan to be with you."

\* \* \*

*Miss Esther Allen, Allen Agency (Exhibitor):* "First, my appreciation to you for your fine organizational ability. You have the 'know how' we hear so much about and see so little. Second, my thanks for your kindnesses to me. Third, make a reservation for me for next year, full booth."

\* \* \*

*Wm. F. Funkhouser, C. B. Kendall Co. (Exhibitor):* "You have our congratulations and thanks for conducting a very successful 1949 session of the Michigan State Medical Convention. The uninterrupted continuity of events was beyond reproach. We hope to appear again as an exhibitor at your future sessions. The response from the physicians was most gratifying."

\* \* \*

*R. O. Johnson, Farnsworth Labs. (Exhibitor):* "We want to thank you for your wonderful co-operation at the Michigan State Medical Society session. We appreciated very much the opportunity to be there."



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W. T. Coulter, President, Bruce Publishing Co., St. Paul, Minn.: "I also want to take this opportunity to thank you and members of your staff for the many courtesies extended to Miss Seibert and to me when we were in Grand Rapids. As I have said repeatedly, there is not a better group anywhere in the world than can be found associated with the Michigan State Medical Society."

\* \* \*

Stewart Cowell, J. T. Baker Chemical Co., Detroit: "I want to express my thanks for the many nice things that were done for me. I was made more than welcome by you and the members of your staff."

## VOLUNTARY AGENCY IN REHABILITATION OF THE TUBERCULOUS

(Continued from Page 1389)

600 ex-tuberculous were rehabilitated at the end of the fiscal year 1948-1949. Progress has been made.

There are many problems yet to be met in the program described here. An outstanding need, throughout the state, is for closer co-ordination between the family physician and the sanatorium and vocational rehabilitation staffs. The individual rehabilitation plans are dependent upon good medical supervision, in and out of the sanatorium. It is logical then to urge that the family physician be brought into the picture at the beginning.

Many areas of rehabilitation of the tuberculous are yet to be explored: nonmedical research, sheltered workshops, rehabilitation centers, to list only a few. As in the current program, non-tax funds will be required to initiate these activities. Therefore, the state and local tuberculosis associations will gradually withdraw their financial support from the basic sanatorium rehabilitation programs as rapidly as these obligations are assumed by state and county government. This is the only means by which a progressive campaign against tuberculosis can be waged.

The words of Sir Reginal Wingate can best define the motivation that has given Michigan a real beginning for broader services to the tuberculous:

"To substitute real, effective rehabilitation for the meager comfort of cash compensation; to convert disabled people pauperized through no fault of their own, into wage-earners again; to restore to them the independence of which chance has robbed them; to enable them to bring up their families in healthy conditions; to save them from the bitterness which is inseparable from prolonged, ill-remunerative idleness—surely that is a task worthy of our best endeavours, and one of great service to the nation as a whole."



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# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

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## WORLDWIDE RECOGNITION

Worldwide recognition has again come to the Michigan Department of Health with the designation of its Division of Laboratories as Regional Salmonella Center to collaborate with the World Salmonella Center at the State Serum Institute, Copenhagen, Denmark.

It will be the responsibility of the Michigan Department of Health Laboratories to accept for identification cultures of Salmonella-like bacteria from all over the Middle West. The only other Regional Salmonella Centers in the United States are in the Communicable Disease Center in Atlanta, Georgia, the New York City Health Department and the New York State Laboratories in Albany.

Arnold Juenker will be in charge of the Salmonella Center of the Michigan Department of Health. He will be directly responsible to Dr. W. W. Ferguson of the Department Laboratories, an international authority in the field who is a member of the Shigella Commission of the International Association of Microbiologists and a member of the Sub-Committee of Enterobacteriaceae of the International Association of Microbiologists.

News of the designation of the Department of Health Laboratories as a Salmonella Center was received from Dr. Fritz Kauffman who is in charge of the World Salmonella Center established in 1948 by authority of the World Health Organization.

## STUDY IN TUBERCULOSIS CASE-FINDING METHODS

A pilot study in tuberculosis case-finding methods has been undertaken by the Michigan Department of Health.

An intensified effort has been made to x-ray every adult over fifteen years of age in certain counties of the state. To accomplish this, four of the mobile chest x-ray units of the Department were sent into the Houghton-Keweenaw-Baraga area. The Michigan Tuberculosis Association carried on promotion activities preceding and during the surveys. Miniature x-rays were taken and interpreted by the Department. Persons with abnormal findings were referred to their family physicians. Follow-up activities were undertaken by the local health department and sanatorium.

When results of these surveys have been analyzed, a decision will be made with regard to future policies and plans for the use of mobile x-ray units in the state tuberculosis case-finding program.

## DIABETIC DIETS

*Food and Nutrition Facts for Health and Social Workers*, a booklet of basic material compiled by the Michigan Department of Health, contains diabetic diets which may be helpful to practicing physicians in planning control measures for cases discovered in the current detection drive. Any physician may have a copy of the booklet

from his local health department or from the Michigan Department of Health.

## REGULATIONS FOR CONTROL OF COMMUNICABLE DISEASES REVISED

The 1950 revision of Michigan Regulations for the Control of Communicable Diseases, which includes changes made by the 1949 legislature and by the Commissioner of Health with the approval of the State Council of Health, are now being printed by the Department and will be ready for distribution by December 1. Major changes are in tuberculosis, mumps and epidemic diarrhea control.

Copies of the pocket size regulations may be had by writing to the Michigan Department of Health.

## MICHIGAN DWELLING FIRES

Of the 289 Michigan deaths caused by burns, fire or explosions in Michigan last year, 278 were caused by burns, fire or explosions in homes. More than 43 per cent of the fire deaths were of children under 14 years of age and about 25 per cent of them were of people over 65 years of age.

## COUNCIL APPOINTMENTS

Two appointments to the State Health Council have been announced. Henry F. Vaughan, Dr. P. H., Ann Arbor, was named to succeed himself for a term expiring June 30, 1955. Claude B. Root, D.O., of Greenville, was named to succeed Wesley Mast, M.D., of Tecumseh. His term expires in 1955 also.

## SUBSCRIPTION TO HEALTH BULLETIN AVAILABLE

The October issue of the Michigan Department of Health bulletin, *Michigan Public Health*, contains a discussion of the activities of the Department and current trends in public health as well as an aerial view and organization chart of the Department, and articles on other subjects of public health significance. A copy of the issue or a continuing free subscription may be had for your office or for your personal reading by writing to the Section of Education, Michigan Department of Health.

## THE NURSE IN THE SCHOOL COMMUNITY

More than 2,500 copies of a pamphlet, "The Nurse in the School Community," which deals with the duties of the public health nurse with relation to the school and families of the community have been requested by nursing and education people throughout the state. The pamphlet was first published by the Michigan Department of Health less than a year ago. The publication is being reordered to make additional copies available for those who have use for them. A copy may be had by writing to the Department.

(Continued on Page 1406)



# Homewood Sanitarium

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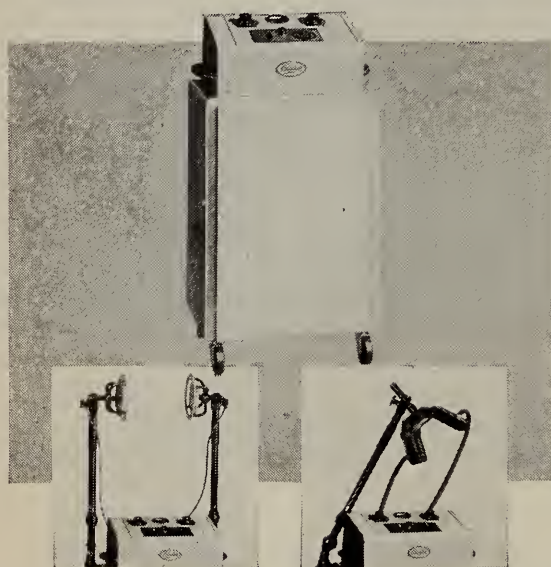


(Continued from Page 1404)

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## POLIO RESEARCH

Dr. Serge Lensen, research virologist with the Department, is co-author of a paper on "An Electron Microscope Study of Material from the Tissue of the Central Nervous System of Poliomyelitic and Normal Mice and Cotton Rats" which appeared in the August issue of the *Journal of Immunology*.

## VISITORS FROM OTHER COUNTRIES

Visiting public health people from India, Bolivia, Jamaica and Canada arrived in the Department during September.

Narayana Rao, M.D., Director of King Institute, Madras, India, spent two weeks studying production of biologics; Mallinath Jain of India spent a few days studying water purification and sewage disposal in the Engineering Division; Jose Antonio Espinosa, V., M.D., of Bolivia arrived and began six months' study in clinical pathology; Louis Grant, M.D., of the Jamaican Public Health Laboratories spent two weeks in the Division of Laboratories and A. E. Chegwin of the Saskatchewan Department of Public Health visited in Dentistry.

## BROADCAST HOUR CHANGED

The time of the Michigan Department of Health quarter-hour broadcast over radio station WKAR, East Lansing, has been changed to 10:30 a.m. Tuesday mornings.

Speakers and subjects on recent broadcasts included: Dr. J. K. Altland, "Functions of a Local Health Department"; Dr. G. D. Cummings, "Fractionation of Blood"; Dr. John A. Cowan, "The Tuberculosis Problem in Michigan"; Dr. F. S. Leeder, "38,000 Unknown Diabetics"; Dr. Fred Wertheimer, "Fluorides and Dental Health" and Dr. Albert E. Heustis, "Current Trends in Public Health."

## SNAKE ANTIVENIN AVAILABLE

Snake antivenin serum is available from any of the laboratories of the Michigan Department of Health, in Lansing, in Powers, in Houghton and in Grand Rapids.

## DIABETES TRANSCRIPTION

As a contribution to the current diabetes education campaign, the Michigan Department of Health has prepared a transcription of a 13-minute broadcast on diabetes which can be used by local stations. The transcription, which was first presented during National Diabetes Week, may be borrowed by writing to the Department, giving the name of the station and the time of expected use.

## BLOOD DONORS GIVE FIVE TIMES

Seventeen Upper Peninsula residents have donated blood five or more times to the Michigan Free Blood Plasma program. Each recently received a commendatory letter for his service from the State Health Commissioner.





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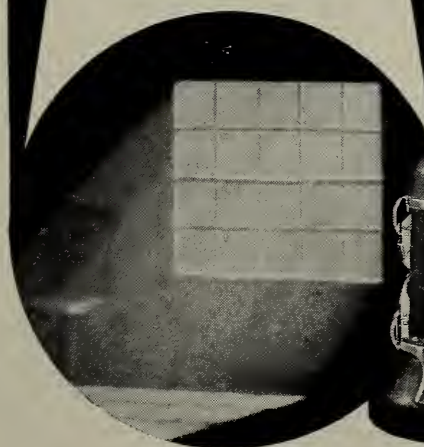
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## NEWS MEDICAL

### Michigan Authors

Wolf W. Zuelzer, M.D., and Leonard Apt, M.D., of Detroit, Michigan, published an article "Naphthalene Poisoning" in the *Journal of the American Medical Association* for September 17, 1949.

Harold F. Falls, M.D., and C. W. Cotterman, Ph.D., Ann Arbor, Michigan, published an article "Choroidoretinal Degeneration: A Sex-Linked Form in Which Heterozygous Women Exhibit a Tapetal-like Retinal Reflex" in *Archives of Ophthalmology* for December, 1948.

John William Derr, M.D., and Rudolph J. Noer, M.D., F.A.C.S., of Detroit, Michigan, published an article "Experimental Mesenteric Vascular Occlusion" in *Surgery, Gynecology and Obstetrics* for October, 1949.

John K. Ormond, M.D., F.A.C.S., John W. Best, M.D., and Milton E. Klinger, M.D., of Detroit, Michigan, published an article "Vesicointestinal Fistulas" in *Surgery, Gynecology and Obstetrics*, October, 1949.

James E. Coyle, M.D., Katherine Collins, B. A., and Walter J. Nungester, M.D., Ann Arbor, Michigan, published an article "Bacitracin: Its Topical Use in Aural and Pharyngeal Infections" in the *Archives of Otolaryngology* for September, 1949.

The *Archives of Surgery*, September, 1949, contains the presidential address of Henry K. Ransom, M.D., of Ann Arbor, read at the Sixth Annual Meeting of the Central Surgical Association, Cleveland, Ohio, February 18, 1949, "Origins of the National and Regional Surgical Societies."

This number of *Archives of Surgery* has six other papers from Michigan authors:

"Treatment of the 'Shock Kidney,'" by John K. Ormond, M.D., and Milton E. Klinger, M.D., of Detroit, Michigan.

"A Method for Control of Bleeding from Esophageal Varices," by Thomas B. Patton, M.D., and Charles G. Johnston, M.D., of Detroit, Michigan.

"Experiences with Islet Cell Tumors," by Roy D. McClure, M.D., and Brock E. Brush, M.D., of Detroit, Michigan.

"Appendicitis: A Ten Year Survey; 1935 through 1944," by E. T. Thieme, M.D., of Ann Arbor, Michigan.

"Tetraethylammonium Chloride in Experimental Vascular Injuries of Limb, Bowel and Heart," by Edward J. Hill, M.D., John M. Hammer, M.D., Harry C. Saltzstein, M.D., and Clifford D. Benson, M.D., of Detroit, Michigan.

"Effect of Distention and Intestinal Revascularization," by Rudolf J. Noer, M.D., and John William Derr, M.D., of Detroit, Michigan.

Thomas Francis, Jr., M.D., Ann Arbor, "The Family Doctor,"—*JAMA*, October 1, 1949.

Ward M. O'Donnell, M.D., Ann Arbor—"Tostabortal Oliguria"—*JAMA*, August 13.

Harry C. Saltzstein, M.D., Detroit, and Robert S. Pollock, M.D., San Francisco—"Benign Tumors of the Breast"—*JAMA*, July 27.

\* \* \*

Homer H. Stryker, M.D., Kalamazoo, Michigan, addressed the Hamilton Academy of Medicine, Hamilton, Ontario, Canada, on September 14, 1949, on the "Early Diagnosis of Bond Cancer."

\* \* \*

A new pamphlet has just been distributed to the Auxiliary, "It's Your Crusade, Too!" This is prepared especially for the women for joining the campaign to preserve independent medicine. For copies of the pamphlet, write: The National Education Campaign, American Medical Association, One North LaSalle Building, Chicago 2, Illinois.

\* \* \*

R. L. Dixon, M.D., formerly superintendent of the Caro State Hospital for Epileptics, has retired and has established private practice limited to the diagnosis and treatment of epilepsy in Caro, Michigan.

\* \* \*

The American Board of Obstetrics and Gynecology, Inc., held its annual meeting May 12 to 14, 1949, and certified 236 candidates. Changes were made in the regulations and new bulletins are now available from the Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania. The next scheduled examination (Part I), written examination and review of case histories, will be held in various cities of the United States and Canada on Friday, February 3, 1950. Applications may be made until November 5, 1949.

\* \* \*

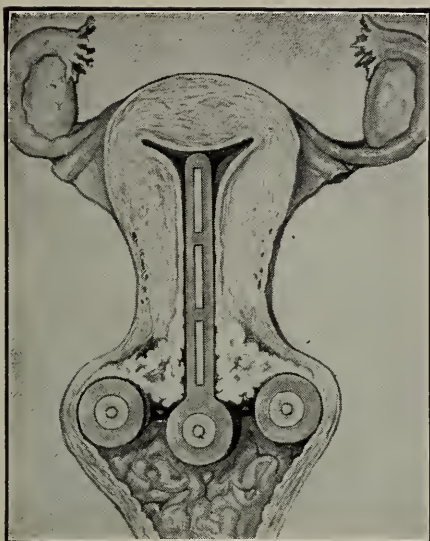
Maynard M. Conrad, M.D., and Curtis M. Hanson, M.D., announce their association in practice limited to Orthopedic Surgery in Kalamazoo, Michigan.

\* \* \*

A Sectional Meeting of the American College of Surgeons is to be held at the Brown Hotel, Louisville, Kentucky, on February 20 and 21. This meeting will consist of all-day and evening conferences on timely surgical subjects and separate meetings for hospital personnel

(Continued on Page 1410)

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(Continued from Page 1408)

where hospital problems will be considered at panels and round table discussions.

The surgical program will include some new surgical motion picture films, papers and panels on such subjects as: Arterial Lesions of the Extremities, Hormone Therapy in Breast Lesions, Intestinal Obstruction, Gastric and Intestinal Intubation, Treatment of Head Injuries, Surgery of the Hand, Surgical Lesions of the Stomach, Caesarean Section, Management of Uterine Prolapse, the Management of Traumatic Conditions and a Symposium on Cancer.

Members of the Michigan State Medical Association and personnel of Michigan Hospitals are invited to attend this meeting. The fellows of the College in Louisville wish to assure all visitors that adequate hotel accommodations will be available and that they will be made most welcome at all of the sessions.

\* \* \*

The American Cancer Society has issued a pamphlet in which are listed a number of motion pictures related to cancer that are available for hospital staffs, medical schools, nursing schools, postgraduate courses in cancer, state and county medical meetings. Requests should be made to: American Cancer Society, Professional Education Section, 47 Beaver Street, New York 4, New York.

A few titles include, "Cancer of the Head and Neck," "Cancer of the Skin," "Cancer of the Breast." Some of them are in color; some are silent; showing time sixteen minutes, twenty minutes, thirty-six minutes; there are about 75 such slides. D. R. Weaver, M.D., of Detroit prepared two films. Others who prepared films are Philip Thorek, M.D., Elmer Hess, M.D., The Lahey Clinic, and Fred Rankin, M.D.

\* \* \*

The American Academy of General Practice of Wayne County held a conference consisting of postgraduate lectures in the Henry Ford Hospital, Detroit, October 26 and 27. Programs started each day at 8:30 and ran until 3:30 in the afternoon.

\* \* \*

The Federal Security Agency is again requesting that qualified persons apply for examinations of the United States Public Health Service. All candidates must be United States Citizens, 21 years of age, seven years of educational training for Assistant Scientist, ten years of educational training for Senior Assistant Scientist; seven years of educational training for Assistant Sanitarian, and ten years of educational training for Senior Assistant Sanitarian.

Written professional examinations will include *Entomologist*: General entomology: classification and identification; morphology; physiology; life histories. Medical entomology: general parasitology; morphology; arthropod transmission of disease; life histories of vectors; arthropod-borne diseases; host-parasite relationships; insect control; distribution and ecology of disease vectors. *Parasitologist*: General parasitology: classification; morphology; life cycles; host-parasite relationships; distribution; physiology. Medical parasitology, especially helminthology: classifica-

(Continued on Page 1412)

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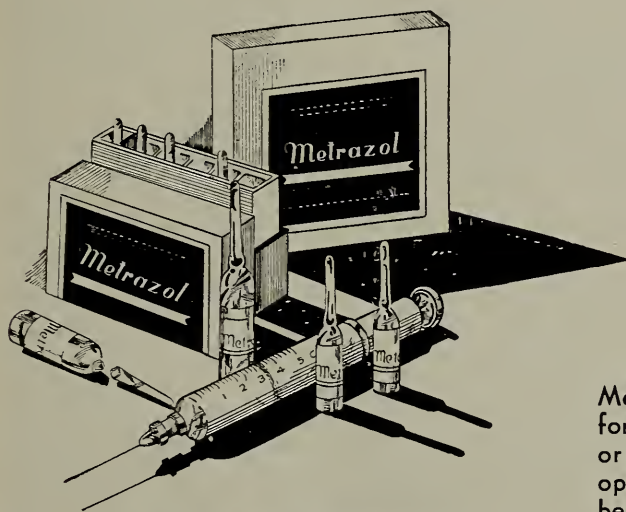
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(Continued from Page 1410)

tion and identification; life cycles; distribution; epidemiology; host-parasite relationships; prophylaxis, treatment and control; pathology. *Protozoologists*: General protozoology: morphology; classification; physiology and growth requirements; life cycles; distribution and ecology. General parasitology; life cycles; host-parasite relationships; morphology and classification; distribution. Medical protozoology: classification and identification; life cycles; host-parasite relationships; distribution; treatment and control; pathology. *Candidates for the grade of Assistant Scientist and Assistant Sanitarian* will be examined, in addition to the subjects listed above, in the basic sciences.

\* \* \*

*E. F. Sladek, M.D.*, Traverse City, immediate Past President of the Michigan State Medical Society, was signally honored in a testimonial editorial entitled "A Medical Leader" which appeared in the *Traverse City Record Eagle* on September 23. One of the paragraphs read: "Dr. Sladek's home community should realize the important part he has played in state medical circles and how, during his association with the State Society, he has gained in stature."

\* \* \*

*Udo J. Wile, M.D.*, Ann Arbor, was guest speaker at the Centennial Session of the Indiana State Medical Association in Indianapolis on September 27. His subject was "The Evaluation of Syphilis Therapy."

\* \* \*

*Charles F. Wilkinson, M.D.*, formerly of Ann Arbor, is now Head of the Department of Internal Medicine at the New York Postgraduate School of Medicine. Congratulations, Dr. Wilkinson!

\* \* \*

*C. Allen Payne, M.D.*, Grand Rapids, spoke at the National Medical Public Relations Conference in Chicago, November 5, on the subject of "Full Utilization of the Woman's Auxiliary as a Public Relations Force."

\* \* \*

The *Second Pan American Congress of Otorhinolaryngology and Bronchoesophagology* will be held in Montevideo, Buenos Aires, January 8-15, 1950. A very nice program has been arranged.

The official languages will be Spanish, Portuguese and English with a service of simultaneous translation. Representatives will be present from all of the Americas.

This is the height of the season in Montevideo and Buenos Aires and excellent side trips have been arranged.

For further information write to: Dr. Chevalier L. Jackson, 3401 North Broad Street, Philadelphia 40, Pa.

\* \* \*

*Michigan Medical Service* reports that between February 1 and August 31, 1949, it enrolled 8,176 subscribers through the community enrollment plan. In addition, 7,434 group subscribers were added to the

(Continued on Page 1414)

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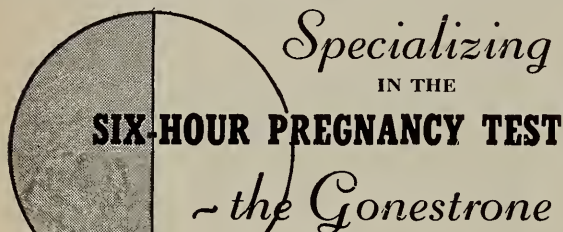
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(Continued from Page 1412)

MMS rolls as a direct result of the community enrollment.

\* \* \*

The American Goitre Association again offers the Van Meter prize award of \$300 and two honorable mentions for the best essay submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the Association in Houston, Texas, March 9-10-11, 1950. For information write George C. Shivers, M.D., Corresponding Secretary of the Association, 100 East St. Vrain St., Colorado Springs, Colo.—manuscripts must be received no later than January 15, 1950.

\* \* \*

The Michigan Society of Anesthesiologists will hold its next regular meeting on December 14, at 6:30 P.M. at the Hotel Porter, Lansing, Michigan. The topic for discussion is "Pediatrics Anesthesia." Any physicians interested in this subject are welcome to attend.

\* \* \*

The Army urgently needs Medical Officers to serve in a civilian capacity with the Occupation Forces in Japan. These positions, which involve the performance of the various duties of a general practitioner on an Army hospital staff, pays salaries of \$6,235.20 per year plus 10 per cent post-differential with quarters at no cost to the employee. Individuals selected for appointment must agree to remain a minimum of two years in Japan. Transportation is furnished to and from Japan. Dependents may join the doctor in approximately eight to ten months after his arrival in the command. Application may be made with the Civil Service Commission (standard form 57) c/o John J. Plattenburg, 1660 E. Hyde Park Blvd., Chicago 15, Illinois.

\* \* \*

The Michigan Proctological Society was organized in Grand Rapids on September 22 during the MSMS Annual Session. The following officers were elected: E. F. Sladek, M.D., Traverse City, President; J. W. Becker, M.D., Detroit, Secretary. The Society will meet annually coincident with the Annual Sessions of the Michigan State Medical Society.

\* \* \*

The Michigan Neuropsychiatric Association was organized in Grand Rapids on September 22 during the MSMS Annual Session. New officers are: Chairman, P. C. Robertson, M.D., Ionia, and Secretary Roy A. Morter, M.D., Kalamazoo.

\* \* \*

The Michigan Chapter of the American Academy of General Practice held its second annual meeting Thursday, September 22, in the Pantlind Hotel, Grand Rapids. The following officers were elected to serve during 1949-1950: President, Leslie T. Henderson, M.D., Detroit, President-Elect, John F. Failing, M.D., Grand

(Continued on Page 1416)





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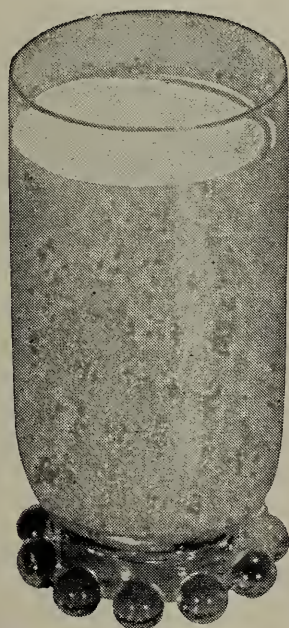
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(Continued from Page 1414)

Rapids, and Secretary-Treasurer, Harold F. Raynor, M.D., Detroit.

Following the business meeting, members held a reception honoring the national president, Elmer C. Texter, M.D., Detroit.

\* \* \*

*Medical Economics in Grand Rapids:* The series of discussions covering various phases of Medical Economics, such as: Choice of Location to Practice, Initial Financing of a Practice, How to Establish Proper Fees, Setting up of Office Bookkeeping System, Collection of Accounts, Estate Planning, etc., will be given again this year for Residents, Interns and Staff members of the Blodgett, Butterworth and St. Mary's Hospitals.

The discussions will be held twice monthly, from October to the second week of June. It is planned that a picnic will again be held the latter part of June for all of those participating.

The subjects will be handled by competent Attorneys, Accountants, Physicians, Estate Planners, Insurance Men, and Associates of Professional Management.

\* \* \*

*The law in the Michigan school code* that has to do with sex education in schools was amended at this session of the Legislature. The requirement that anyone teaching sex hygiene have a degree from a school of medicine, public health, or nursing was deleted. A new proviso was inserted: "Provided, that any program of instruction in sex hygiene be supervised by a registered physician, a registered nurse, or a person holding a teacher's certificate qualifying such person as a supervisor in this field."

This removes the legal threat to the work that many schools have been doing in developing integrated instruction in this phase of health education through regular curriculum channels. Where supervision and consultant service by a physician or nurse is available it can strengthen the program. Where no such assistance is at hand, the instruction can be supervised and given by qualified members of the teaching staff.

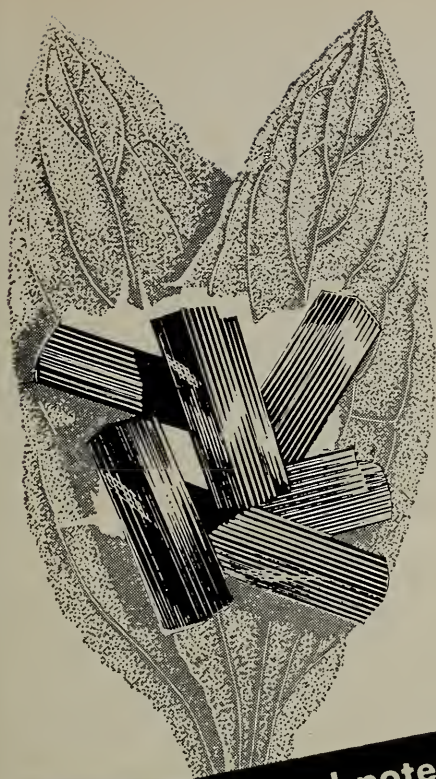
No other changes were made in the law. The two provisos still stand—that instruction in birth control is prohibited and that children shall be excused from attending classes in which sex hygiene is discussed, upon written request of parent or guardian. The amended law is P.A. 226 of 1949.

\* \* \*

*Successful Cancer Conference.*—More than one hundred persons from every section of Michigan attended the First Annual Cancer Conference conducted Tuesday, October 11, in the Olds Hotel, Lansing. Norman F. Miller, M.D., Ann Arbor, Chairman of the Cancer Control Committee of the MSMS, presided over the meeting open to all persons interested in cancer research and control.

Dr. Miller stressed to the group that "if our combined forces can be co-ordinated to fight cancer by means available today, deaths from many of the more

(Continued on Page 1418)



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(Continued from Page 1416)

common cancers will be reduced tenfold and death from certain cancers will be practically eliminated."

In addition to Dr. Miller, Albert E. Heustis, M.D., state health commissioner, Arthur W. Strom, M.D., Hillsdale, and Mr. Donald E. Johnson, Flint, past-president of the American Cancer Society's Michigan Division, appeared on the program.

The Hillsdale Plan of Cancer Detection was explained in detail by Dr. Strom; this co-operative community project was the subject of many questions at the round-table discussion which closed the conference.

Arrangements for the meeting, sponsored by the MS-MS, Michigan Department of Health and the Michigan Divisions of the American Cancer Society, were under the direction of Dr. Miller and F. L. Rector, M.D., Ann Arbor, Secretary of the Cancer Control Committee.

\* \* \*

*The First Annual HEART DAY* sponsored by the Michigan Heart Association will be held on Saturday, March 11, 1950, following the Michigan Postgraduate Clinical Institute. Three lectures will be presented in the Crystal Ballroom of the Book Cadillac Hotel, Detroit, followed by a luncheon and the annual meeting of members of the Michigan Heart Association. Acceptances have been received from Irving Page, M.D., Cleveland, and from Louis J. Katz, M.D., of Chicago. The complete program will be published in the December number, JMSMS.

\* \* \*

*Establishment of a cancer diagnostic teaching clinic* devoted to the instruction of medical graduates in the skills and arts necessary for diagnosing cancer was approved October 11, 1949, by the Detroit Board of Education as a co-operative program of the American Cancer Society, the Detroit Institute of Cancer Research and the Wayne University College of Medicine.

Dr. Gordon H. Scott, acting dean of the college of medicine, stated that the college would undertake to staff and operate a teaching program in the Cancer Center Building at John R. and Hancock.

William S. Murray, executive director of the American Cancer Society, Southeastern Michigan Division, said in proposing the program, "It is our common belief that every physician's office should be a cancer diagnostic center. It is our hope that the University will contribute faculty personnel and make it possible for medical graduates to enroll in definite courses of instruction in cancer to be conducted at the Cancer Center Building, Detroit Receiving Hospital and the Veterans Administration Hospital, Dearborn. We hope that Wayne will co-ordinate these activities to the end that each student so enrolled may receive the well-rounded instruction and experience so necessary for sound practice in this field."

\* \* \*

*Look on AMA.*—One of the most comprehensive, factual and pictorial stories on "What Is The A.M.A.?" appeared in the October 11th issue of *Look Magazine*. Written by one of the publication's top staff writers, the

(Continued on Page 1420)

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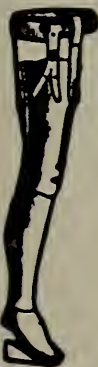
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Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting November 7, February 6, March 6.

Surgery of Colon and Rectum, one week, starting November 28, March 6.

Esophageal Surgery, one week, starting April 17.

Breast and Thyroid Surgery, one week, starting June 19.

Thoracic Surgery, one week, starting June 12.

Fractures and Traumatic Surgery, two weeks, starting April 17.

**GYNECOLOGY**—Intensive Course, two weeks, starting February 20.

Vaginal Approach to Pelvic Surgery, one week, starting November 7, March 6.

**OBSTETRICS**—Intensive Course, two weeks, starting November 7, March 6.

**PEDIATRICS**—Intensive Course, two weeks, starting April 3.

**MEDICINE**—Intensive General Course, two weeks, starting April 3.

Gastroscopy, two weeks, starting March 6.

**DERMATOLOGY**—Formal Course, two weeks, starting May 1. Informal Clinical Course every two weeks.

**ROENTGENOLOGY**—Diagnostic and Lecture Course first Monday of every month.

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(Continued from Page 1418)

article presented the following highlights to its more than 19,000,000 readers:

1. A.M.A.'s over-all officers and the work of every bureau, council and committee.
2. A.M.A.'s ten outstanding achievements.
3. A.M.A.'s 12-point program carried in full.

It is hoped that the widest use will be made of this article. Reprints are available at the printing cost of \$2.50 per hundred copies.

#### ANNUAL DUES AND ASSESSMENTS OF SEVENTEEN STATE MEDICAL ASSOCIATIONS

States	Totals	1949 Dues	1950 Dues	Asses- ments
1. California .....	\$50.00	\$50.00	—	—
2. Colorado .....	50.00	50.00	—	—
3. Wisconsin .....	50.00	50.00	—	—
4. North Carolina .....	45.00	25.00	\$40.00	\$ 5.00 (spec. P/P)
5. Oklahoma .....	42.00	42.00	—	—
6. West Virginia .....	40.00	15.00	—	25.00 (voluntary)
7. Michigan .....	37.00	12.00	—	25.00 (Pub. Ed.)
8. Minnesota .....	30.00	30.00	—	—
9. New Jersey .....	30.00	24.00	30.00	—
10. Virginia .....	25.00	25.00	—	—
11. Massachusetts .....	25.00	25.00	—	—
12. Kansas .....	25.00	25.00	—	35.00 (1948)
13. Florida .....	25.00	25.00	—	—
14. Illinois .....	20.00	15.00	20.00	—
15. Indiana .....	15.00	15.00	—	—
16. Ohio .....	15.00	15.00	—	—
17. Pennsylvania .....	15.00	15.00	—	—
18. Tennessee .....	15.00	15.00	—	—

#### MICHIGAN MEDICAL SERVICE

(Continued from Page 1395)

will give complete hospital coverage—medical and surgical. The rate will necessarily be higher and the benefit to the patient and to the doctor will be greater. There was considerable argument about the percentage of increase, but the officials are left with the responsibility of writing a new policy.

This new departure comes, as it should, as orders from our membership, and it carries a distinct measure of responsibility by our membership. No new policy can be put into effect unless our doctors will accept it as a new program and try to make it work as it should and could work. In other words, if our membership sabotages this program, we might better not start it. The program accepts the theory that the living wage of the average family is now \$5,000 instead of \$2,500 and that what people pay for their voluntary service is supposed to cover that voluntary service. Several surveys have been reported showing that actually in limited areas the doctors have been charging about 40 per cent more than the present rates. People are now earning on an average of twice as much as they did ten years ago. The medical profession has asked for this increase, and we believe will be glad to make the program work.



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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**A TEXTBOOK OF NEUROPATHOLOGY**—With Clinical, Anatomical and Technical Supplements: By Ben W. Lichtenstein, B.S., M.S., M.D., Associate Professor of Neurology, the University of Illinois College of Medicine; State Neuropathologist, Illinois Neuropsychiatric Institute. New, 1st Edition. 474 pages with 282 figures. Philadelphia & London: W. B. Saunders Company, 1949. Price \$9.50.

Doctor Lichtenstein's "Text Book on Neuropathology" is an exceptionally well written and edited text book. He presents his material in an interesting manner. He has incorporated clinical, anatomical and technical supplements which should be of great benefit to the student. The outstanding features are the many excellent illustrations, the presentation of a considerable amount of clinical material along with the pathology discussed and an abundant reference listing. The technical aspect consists of neurological staining methods and impregnation technics. The clinical supplement comprises a description of syndromes, paralyses and uncommon diseases, a type of material not commonly found in text devoted to pathology. To the student or physician interested in neuropathology the book is unqualifiably recommended.

G.K.S.

**NEW AND NONOFFICIAL REMEDIES—1949.** Issued under the Direction and Supervision of the Council on Pharmacy and Chemistry of the American Medical Association. Philadelphia: J. B. Lippincott Co., 1949.

This is an annual volume keeping us all up to date on the newer remedies. It is a valuable and necessary reference.

Drugs are proving an effective aid in therapeutic treatment of some of the nation's 200,000 child victims of cerebral palsy, according to Dr. Meyer A. Perlstein of Chicago, Secretary of the American Academy of Cerebral Palsy.

In an article in the current *Crippled Child Magazine*, published by the National Society for Crippled Children and Adults, Dr. Perlstein points out that many drugs producing a relaxing effect have been of therapeutic value in treating this disease which is often characterized by rigidity, tension or stiffness in the muscles.

Discussing the decreased tension produced by such drugs as tridione, curate, amytal and phenobarbital, Dr. Perlstein says that alcohol often exerts such a relaxing, stabilizing effect. "In proper doses it may clarify instead of dull the thinking," he states.

Dr. Perlstein cautioned that drug therapy is only an aid to special treatment of the cerebral palsied. "No matter what the effect of any drug, it is certainly no substitute for the use of all other forms of treatments applicable to these disorders," he added.

## MANAGEMENT OF THE PATIENT IN THE POST-SANATORIUM PERIOD

(Continued from Page 1383)

lem means. Many of them have had close contact with the ancient enemy either as patient or brother, husband or father. Never before have we had more effective methods of detecting relapse early, nor better facilities available for the proper care of the patient should he need a continuation of his previous hospital care (care of the tuberculous in Michigan is provided at public expense, and expenditures for this purpose are considered expenditures for public health and not for the purpose of welfare or relief—Act 249 of the Public Acts of 1945).

The physician does not work alone in this field either in private practice or in the sanatorium. He allies himself with public health experts, field workers, trained educators, inspired and diligent crusaders who not only work beside the physician but prepare the way for him. The physician of today works with an educated, co-operative patient.

Victory in tuberculosis control will come when those of us in private practice learn to work in close harmony with the other members of the team dedicated to the eradication of this last important preventable disease.

A lesson in economics, figures supplied by the Tax Foundation and the Treasury Department, shows that since 1933, sixty regular state aid programs have returned to Michigan. On 10 per cent of the internal revenues collected in Michigan, Uncle Sam has collected \$15,430,618,000 since 1933. During the same year the federal government has returned to the state \$1,472,701,000. These state aid programs include things like school lunches, sub-marginal land payments, hospital and health assistance, old-age assistance, public roads, conservation and veterans benefits. Michigan along with Illinois, Maryland, New Jersey and Virginia ranks fortieth among the states in ratio of dollars returned to the state.

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Massage and Swedish Movements—Medical Gymnastics

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Dear Doctor:

In response to your request for a note in regard to the lending library service for physicians through the State who do not have an adequate local library. As a result of the adoption of a resolution in this regard by the Delegates of the State Medical Society in 1948, Dr. H. H. Cummings reported that the University of Michigan Medical Library has had such a service for sometime. The resolution was introduced in the first place because the recent graduates who located in the smaller communities complained that medical literature was not locally available.

Fraternally yours,

CARL G. KRIEG

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Fig. 2 — Tablet in duodenum. Liver bile plus increased alkalinity hastens emulsification of lipids of coating.

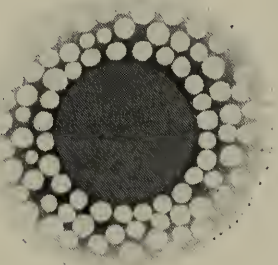
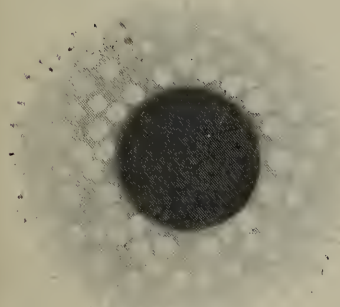


Fig. 3 — Complete disintegration.



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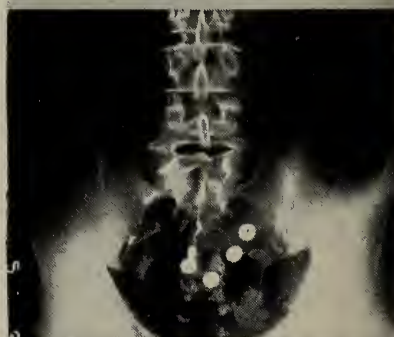
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QUANTITY	ARTICLE
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Vials	TESTOSTERONE PROPINATE IN OIL

Name .....

Address ..... City .....



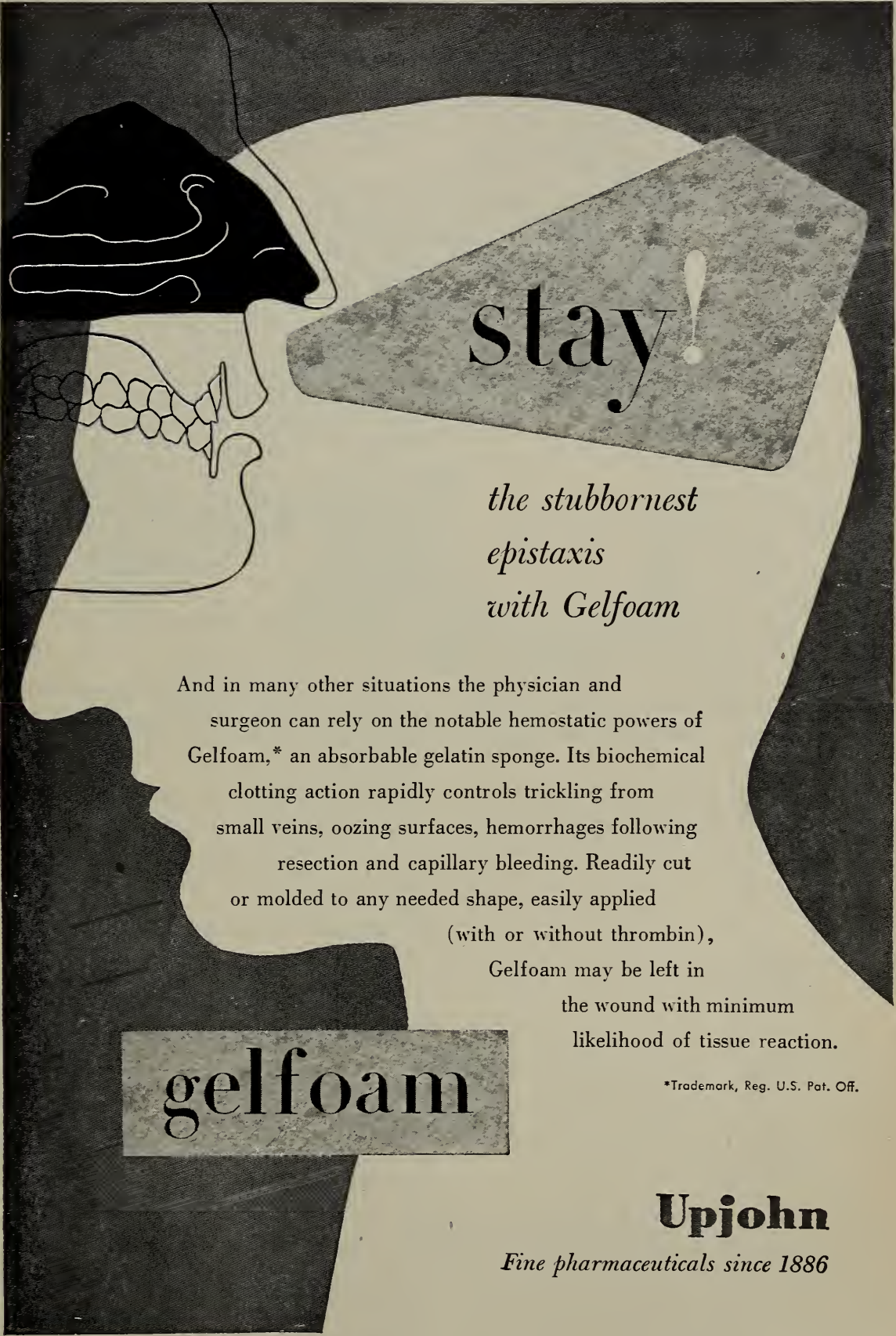
# You and Your Business

## HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of October 19, 1949

- Monthly financial reports, including detailed breakdown of the Public Education Account and of the Public Education Reserve Account, were presented, studied, discussed and approved. Bills payable for the current month were presented and approved.
- The osteopaths' request to be entitled, *legally*, to render service to afflicted and crippled children under Michigan's two acts authorizing medical service to these wards of the State: A report on the osteopaths' petition to the Legislative Committee on Administrative Rules, at its October 5, 1949, meeting, requesting such a change in the rules and regulations of the Michigan Crippled Children Commission, was reported. After a full day of arguments, presented by the Michigan Association of Osteopathic Physicians and Surgeons and its Legal Counsel, the Legislative Committee on Administrative Rules decided that it had no jurisdiction in the matter and referred the osteopaths to the Legislature of 1951.
- Two representatives of the Michigan State Medical Society to the Medical Care Section of the American Public Health Association (meeting in New York, week of October 24) were appointed.
- The Standing and Special Committees of The Council for the year 1949-50 were appointed by Chairman O. O. Beck, M.D.
- Committee reports were accepted from the Advisory Committee on Hearing Conservation; the Tuberculosis Control Committee jointly with the County Societies Committee of The Council; and from the Medical Director of the Michigan Rheumatic Fever Control Program (Leon DeVel, M.D.).
- Fee schedules in Michigan's counties for medical care of welfare patients: An analysis of these schedules was presented to the Executive Committee of The Council which instructed that the information be forwarded to all county medical societies via the next Secretary's Letter. The value of Filter Boards, to save finances for the counties, was stressed.
- Public meetings on various scientific subjects (such as heart, rheumatic fever, diabetes, etc.) were authorized, to be organized through the MSMS Public Relations Department, with the co-operation of all special societies interested in control of these various diseases.
- Tentative program for the Annual County Secretaries-Public Relations Conference of January 22, 1950, Book-Cadillac Hotel, Detroit, was discussed. The theme of the meeting will be "Americanism."
- Group practice study—a request from the AMA for information on the subject of group practice throughout the State of Michigan was referred to the various Councilors of the State Society, for action.
- March, 1950, Michigan Postgraduate Clinical Institute: J. J. Lightbody, M.D., Detroit, was appointed as Chairman of the Wayne County Hospitality Committee; E. C. Texter, M.D., Detroit, was appointed as Chairman of the Committee on Hotels; and R. A. Johnson, M.D., Detroit, Chairman; J. S. DeTar, M.D., Milan; H. F. Dibble, M.D., Detroit; and S. W. Donaldson, M.D., Ann Arbor, were appointed to the Press Relations Committee.
- Scrolls were authorized to be presented on March 10, 1950 (during the Postgraduate Institute) to F. A. Coller, M.D., Ann Arbor, as President of the American College of Surgeons and to A. H. Whitaker, M.D., Detroit, as President of the American Association of Industrial Physicians and Surgeons.
- Organization of state medical society legal counsels. This recommendation of Legal Counsel J. Joseph Herbert was approved by the Executive Committee of The Council. Mr. Herbert was authorized to proceed with a plan to organize the legal counsels of the various state

(Continued on Page 1434)



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And in many other situations the physician and surgeon can rely on the notable hemostatic powers of Gelfoam,\* an absorbable gelatin sponge. Its biochemical clotting action rapidly controls trickling from small veins, oozing surfaces, hemorrhages following resection and capillary bleeding. Readily cut or molded to any needed shape, easily applied

(with or without thrombin),

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likelihood of tissue reaction.

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*Fine pharmaceuticals since 1886*



## EXECUTIVE MEETING OF THE COUNCIL

*(Continued from Page 1432)*

medical societies in co-operation with the Legal Department of the AMA.

- FBI investigation of medical societies. The Executive Committee of The Council instructed that information on this subject be published in the next CAP Bulletin—and the recommendation that MSMS members read the AMA release on this subject (JAMA, Page 465, October 15, 1949).
- The Public Relations Counsel's progress report included a list of District CAP meetings (the first being held in Kalamazoo on October 13); shift of the areas for the Public Relations Field Secretaries was authorized; approval was given to a distribution plan for the MSMS movie "To Your Health" to be made to out-of-state organizations. Report on the progress of the Woman's Auxiliary with its many public relations projects (including distribution of the pamphlet "It's No Bargain") was presented; the basis for a contract of syndication of the MSMS radio program "Tell Me, Doctor" has been arrived at and a contract is being drawn. A large attendance is expected at the 1949 Rural Health Conference scheduled for Grand Rapids October 28-29.
- The meeting was adjourned with thanks to Drs. Frank Van Schoick of Jackson and Dr. John Van Schoick of Hanover for their hospitality on this occasion.

## OPD AT UNIVERSITY OF MICHIGAN HOSPITAL

University Hospital at Ann Arbor has furnished the following practical information, relative to the functioning of its Out-Patient Department, with the hope that it will be better able to supply streamlined service to Michigan doctors of medicine and to their patients:

1. *Consultant Service.*—The University Hospital functions as a consulting service. Except in emergencies, patients are seen only when referred by a physician. Referral may be done in person, by telephone, or by letter, the latter being preferred. It is requested that referral letters contain sufficient clinical information to aid in assigning the patients to the appropriate clinic or clinics. Your

suggestions regarding specific diagnostic procedures that may be required will be most helpful.

All patients below the age of 14 are automatically registered in the Pediatrics Department, after which they may be referred to other specialized clinics.

2. *Clinic Hours.*—Monday through Friday, 8:00 A.M. to 12:00 noon; 1:00 P.M. to 5:00 P.M. Clinics are closed on Saturday, Sunday, and Holidays. (Holidays observed include Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day.)

3. *Registration.*—Patients are requested to arrive at least one hour in advance of the time of their appointments in order to register. This procedure includes 70 mm. chest photofluorogram, standard blood Kahn test, and hemoglobin determination. A single registration is valid for one year.

4. *Appointments for examination.*—*Clinics requiring appointments*

Dermatology  
Gynecology  
Medicine, including:  
Allergy  
Endocrinology & Metabolism  
General Internal Medicine  
Heart Station  
Medical Tuberculosis  
Simpson Memorial Institute for Blood Diseases  
Neurology  
Neuropsychiatry  
Obstetrics  
Ophthalmology  
Otorhinolaryngology  
Pediatrics & Communicable Disease  
Thoracic Surgery  
Veterans Readjustment Center

*Clinics not requiring appointments*

General Surgery  
Oral Surgery  
Orthopedic Surgery  
Neurosurgery  
Urology

If you feel that your patient will require special diagnostic or therapeutic radiology, electroencephalography, or any other highly technical procedure, arrangements for these can be made in advance.

5. *Cost to Patient.*—An initial flat-rate payment for registration and clinic fees is made at the time of registration. The amount of this payment covers professional clinic fees for a period of fifteen days from the date of registration, regardless of the number of visits to a single clinic or the number of clinics visited. It does not include fees for special laboratory tests, x-ray examinations, minor surgical procedures, etc. These are paid at the time the service is rendered.

After the expiration of the fifteen-day period,

*(Continued on Page 1436)*



# 44

## of NEMBUTAL'S CLINICAL USES

### SEDATIVE

**Cardiovascular**  
Hypertension  
Coronary disease  
Angina  
Decompensation  
Peripheral vascular disease

### Endocrine Disturbances

Hyperthyroid  
Menopause

### Nausea and Vomiting

Functional or organic disease  
(acute gastrointestinal and emotional)  
X-ray sickness  
Pregnancy  
Motion sickness

### Gastrointestinal Disorders

Cardiospasm  
Pylorospasm  
Spasm of biliary tract  
Spasm of colon  
Peptic ulcer  
Colitis  
Biliary dyskinesia

### Allergic Disorders

Irritability  
To combat stimulation of  
ephedrine alone, etc.

### Irritability Associated With Infections

### Restlessness and Irritability With Pain

### Central Nervous System

Paralysis agitans  
Chorea  
Hysteria  
Delirium tremens  
Mania

### Anticonvulsant

Traumatic  
Tetanus  
Strychnine  
Eclampsia  
Status epilepticus  
Anesthesia

### OBSTETRICAL

Nausea and Vomiting  
Eclampsia  
Amnesia

### HYPNOTIC

Induction of Sleep

### SURGICAL

Preoperative Sedation  
Basal Anesthesia  
Postoperative Sedation

### PEDIATRIC

Sedation for:  
Special examinations  
Blood transfusions  
Administration of parenteral  
fluids  
Reactions to immunization  
procedures  
Minor surgery  
Preoperative Sedation

## *Adapted to a variety of uses*

Another product adapted to a variety of uses is short-acting Nembutal. Clinical reports now numbering more than 500 review over 44 conditions in which it is being effectively used. See list at right.

Adjusted doses of short-acting Nembutal can provide any degree of cerebral depression—from mild sedation to deep hypnosis. Dosage required is only about *one-half* that of many other barbiturates. Small dosage has several advantages: less drug to be inactivated, less possibility of "hangover," shorter duration of effect, greater safety and definite economy to the patient.

Short-acting Nembutal is available as Nembutal sodium, Nembutal calcium and Nembutal Elixir, all in easily administered small-dosage sizes. For the tab-indexed booklet, "44 Clinical Uses for Nembutal," write to ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS.

In equal oral doses, no other barbiturate combines

QUICKER, BRIEFER,

MORE PROFOUND EFFECT than . . .

# Nembutal®

(Pentobarbital, Abbott)



## OPD AT UNIVERSITY OF MICHIGAN HOSPITAL

(Continued from Page 1434)

the patient pays a return visit fee for each clinic visit.

When patients are unable to bear the expense of care, adults should be referred to the local social welfare department, children's parents to the probate court.

6. *When hospitalization is considered necessary* by the clinic physicians, your patient will be asked to make an initial deposit, based upon the estimated length of stay and anticipated treatment required. He should bring evidence of any hospitalization insurance he carries covering in-patient or out-patient services. With this, we shall be in a position to secure confirmation from his insurance company immediately and thereby assist him in collecting disability and hospitalization benefits without delay.

If you indicate in your referral letter that your patient may require hospitalization, every effort will be made to insure a tentative bed appointment for him.

7. *Reports.*—A report of clinical findings and recommendations will be sent to you after complete examination of your patient. These reports are forwarded after all consultations and diagnostic procedures are completed. Every effort will be made to forward reports as expeditiously as possible.

8. We appreciate your cooperation and will welcome any comments or suggestions that will further the best interests of your patients and improve our service to you.

## APPOINTMENT OF SCIENTISTS (Psychologists) IN THE USPHS

A competitive examination for appointment of Scientists (Psychologists) in the Regular Corps of the United States Public Health Service will be held on March 20, 21, and 22, 1950. Applications must be received *no later than February 20, 1950.*

The Regular Corps is a commissioned officer corps composed of members of the various medical and scientific professions, appointed in appropriate professional categories such as medicine, dentistry, engineering, the sciences, etc. Psychologists are included in the Scientists category of the Service.

Appointments will be made in the grades of Assistant Scientist (equivalent to Army rank of First Lieutenant) and Senior Assistant Scientist (equivalent to Captain). Appointments are permanent in nature and provide an opportunity for qualified psychologists to pursue their

profession as a life career in the Service. While all commissioned officers are subject to change of station and assignment as necessitated by the needs of the Service, consideration is given to the officer's preference, ability, and experience. The coming examinations will be primarily for clinical psychologists, broadly defined, and successful applicants will be assigned to positions involving research, diagnosis, and therapy. Positions in clinics, hospitals, penal institutions, research programs, and administrative work may be available.

## NEW AUSTERITY BUDGET TO MAKE PATIENTS PAY AS COSTS SOAR IN BILLIONS

London, October 19—Britain is being forced into a drastic revision of the system of free socialized medicine as a part of an impending budget slash. . . . But the shock which may hit the public most heavily—more sharply even than prospective higher prices without wage increases—will be the abandonment of the free features of socialized medicine.

This socialized medicine program is the most popular reform in postwar Britain and both parties claim credit for it. The Tories say they started it and the Socialists merely carried out their program. It is, of course, labor's baby. Neither party would dare abolish it.

But the medical program costs vastly more than was expected.

Britons can get free medicines, dentures, toupees, glasses—sometimes two or three pairs. Also a person with a hangover can get free morning-after aspirin by getting a chit from the doctor.

Hypochondriacs pile up waiting lines, and also costs, while telling doctors their ills.

It now develops all this has not been free. When the national health bill was introduced the estimate of the first year's cost from general taxes, beyond worker-employer contributions, was £95,000,000—\$2,660,000,000 at the devalued rate of exchange. Later estimates raised this to £150,000,000 (\$4,200,000,000) for nine months.

In February, 1949, after the system had been operating for seven months, this estimate was boosted to £203,000,000 (\$5,648,000,000) for nine months.

For the current year the estimated total cost of the system from general taxes plus contributions is estimated by officials at £352,000,000 (\$9,856,000,000).


Any politician who tried to wipe out the system would run the risk of being wiped out of office, personally, by voters who have their first glasses and dentures in their lives. But if costs of this kind are not stopped, top cabinet economists are conceding that inflation will dissipate the advantage of devaluation.

So henceforth there is likely to be a specific charge on nearly all services, or a weekly health deduction from pay envelopes, up sharply enough for the patients to know that the service is not free, and perhaps then people will start policing each other's free riding.

To the British public, still largely innocent of understanding what a dollar-jam their country is in, this will go down roughly.

Attlee and Cripps, with an election in the spring, hope to call on a Dunkerque spirit, saying it may be bad politics but the country needs it.

If the proposed cutbacks are skillfully managed, the Conservatives may support much of the program.—*De-troit News*, Oct. 19, 1949.



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to  
recommend  
it**

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(aurothioglucose)



Schering's aurothioglucose has much to recommend it for the treatment of active rheumatoid arthritis. Water soluble, but suspended in oil to provide prolonged absorption, it is effective in small dosage, frequently inducing remissions in early acute phases of the disorder.

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Marked improvement has been reported in "50 to 60 per cent of patients, moderate improvement in 20 to 25 per cent. . . ."<sup>1</sup> Among 1000 patients treated recently with SOLGANAL, there were no fatalities and few instances of severe toxicity.<sup>1</sup>

1. Rawls, W. B.: New York Med. (no. 15) 3:19, 1947.

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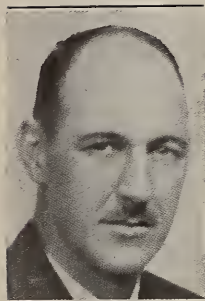
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**SOLGANAL**



# Michigan Rural Health Conference



R. J. HUBBELL, M.D.

The Third Annual Michigan Rural Health Conference is history.

Any recording of the two-day event held in Grand Rapids, October 28-29, will of necessity have to state that the meeting, which is used as a model for similar gatherings throughout the nation, was an unqualified success.

Part of the credit for the 1949 Conference, which established a new registration figure of 507, is due to the year-round efforts of the Committee on Rural Medical Care of the Michigan State Medical Society headed by Councilor R. J. Hubbell, M.D., Kalamazoo. Dr. Hubbell met several times as a member of the Committee on Arrangements and during the Conference served as Chairman of the Committee on Resolutions. Commenting on this year's meeting, Dr. Hubbell said:

"The comments of those in attendance indicate that the conference carried on and amplified the work of previous years in determining rural health needs and ways to meet them. From the seeds of knowledge which were planted in the minds of rural leaders, we feel certain that many tangible results will be forthcoming. The

assemblage benefited greatly from the national speakers who keynoted the program. Opportunity was provided for expression of the thinking of people from small rural communities through several open discussion periods. The Michigan Foundation for Medical and Health Education and the other fifty-two co-sponsors deserve unqualified congratulations for this splendid meeting. Special praise goes to Chairman E. I. Carr, M.D., Lansing, and Executive Secretary E. H. Wiard, Lansing, for their expert handling of the details of this year's meeting."

The 1949 Conference emphasized open discussion. Persons from ten geographical areas, comprising every county in Michigan, talked on the health problems in their own areas. From these small groups the participants went into four larger assemblies where the subjects "Obtaining and Retaining an M.D. in a Rural Area," "Community Health Education," "Rural Public Health" and "Medical Care Facilities" were discussed.

Outstanding personalities on the program included Dr. J. O. Christianson, Minneapolis Superintendent of the School of Agriculture, University of Minnesota, Mrs. Charles Sewell, Chicago, Administrative Director, Associated Women of the American Farm Bureau Federation; Prof. Paul D. Bagwell, East Lansing, Past President, United States Junior Chamber of Commerce; and J. S. DeTar, M.D., Milan Councilor MSMS.

## RESOLUTIONS ADOPTED

1. That discussion pertaining to health personnel problems of a combined lay and professional character in a community should be initiated principally by lay groups, preferably through the medium of a County Health Council.  
That the local and state co-sponsoring groups explore the important question of making living, social and financial conditions of a nature to attract young medical practitioners and especially those with families, to locate in rural communities.
2. That Community Health education be implemented by training of persons in the mechanics of accomplishment of these objectives.
3. That the obtaining of local health departments is best achieved by cooperation between interested local groups and boards of supervisors.
4. That the Office of Hospital Survey and Construction give highest priority in its future construction plans to public health and medical care centers in isolated rural communities in order to attract physicians to such communities.  
That greater emphasis be placed by the Office of Hospital Survey and Construction upon the widest possible distribution of information concerning the hospital and health center construction program under Public Law 725.  
That the education of nurses, medical technologists, physical and occupational therapists and dietitians is primarily a responsibility of the public schools, colleges and universities which should set the standards and assume the major financial responsibility.  
That the hospitals and health centers in every community be utilized to the fullest possible extent in such an educational program to make educational opportunities conveniently available to everyone.
5. That a meeting of all co-sponsors of this Conference be called by the presiding chairman of the Conference at the earliest reasonable date following this meeting—not later than January 31, 1950, for the purpose of determining upon a place and date and a Committee on Arrangements for the Fourth Annual Michigan Rural Health Conference to be held in 1950.



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An important advance in Diathermy apparatus...

• CRYSTAL CONTROL ...

Assures accurate frequency stability for the life of the unit.

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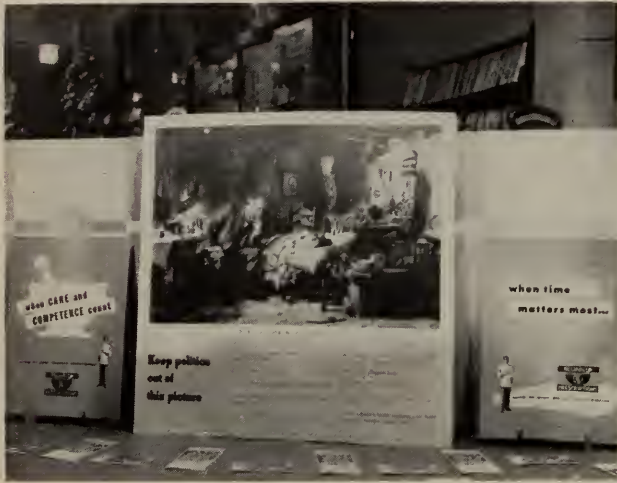
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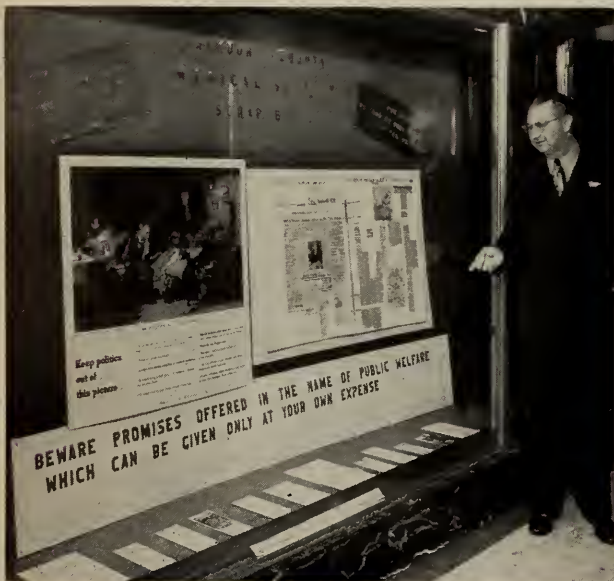


# PR In Practice



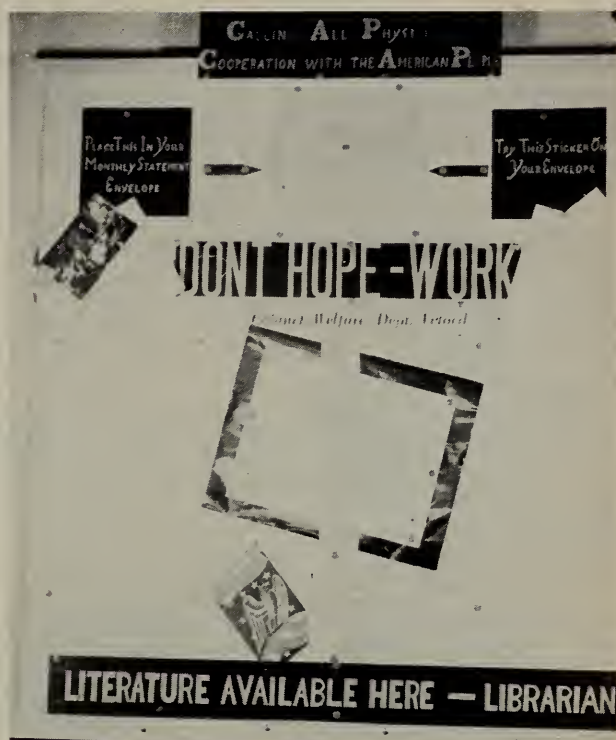
**IN DRUG STORES**—The use of drug store windows as a medium for telling the story of voluntary medicine is strikingly illustrated at the left by the window display of the Garland Pharmacy in Traverse, City, Michigan. The window was one of a large number placed by druggists of this city after a meeting held with the medical society, druggists, lawyers, insurance men and others in which the friends of medicine asked what part they could take in the campaign. The picture illustrates one way the druggists cooperated.

**AT FAIRS AND CONVENTIONS**—Attractive, colorful displays of the type pictured at the right have been used with great success throughout the state. This particular display was developed by the Michigan State Medical Society and has been used in store windows, at conventions, and at county fairs. Typical of the use was by the Jackson County Medical Society during the period of the Jackson County Fair last summer. Another utilization was when it occupied one of the larger display windows of Wurzburg's, a Grand Rapids department store. At conventions or meetings it can attract attention to the work of the medical profession in much the same way as was done at the recent MSMS Annual Session.



**IN BANK LOBBIES OR WINDOWS**—The Security National Bank of Battle Creek in cooperation with the Calhoun County Medical Society acquainted residents of that city in the national education program of the medical profession through the attractive lobby window display shown at the left. Bank President Horace F. Conklin is shown examining the window which plays up the large poster of "The Doctor." This is another excellent example of the co-operation that is being shown throughout Michigan and the nation by professions and organizations interested in keeping Americanism in America.

**HOSPITAL BULLETIN BOARDS**—An outstanding job to implement further the information available to doctors of medicine throughout Michigan is the photo at the right. It was taken in the Woman's Hospital of Detroit and is the work of one of the State's outstanding CAP workers, Roy C. Kingswood, M.D., Detroit. Dr. Kingswood and his Committee have established Bulletin Boards in most of Detroit's hospitals upon which items of particular interest to doctors are placed. Excellent photostated material from various newspapers and magazines has been supplied for Hospital Bulletin boards by R. L. Novy, M.D., Detroit. In addition, the Wayne County CAP Committee publishes a weekly mimeographed "CAP Bulletin" which occupies a prominent place on the bulletin board. Comments from busy physicians in the Detroit area indicate that this is a most unusual, yet extremely effective, approach to the problem of keeping individual doctors of medicine informed.



### THE USE OF MEDIA—DISPLAY

The Public Relations office this month is instituting the first of a series of articles illustrating the practical application of the various forms of media that can be utilized in forwarding the medical public relations program of the MSMS.

The initial series serves to show in what ways visual mediums (other than motion pictures, sound strip films and slides) can be used by county medical societies throughout Michigan.

In following months, the articles will treat the use of radio, newspapers, magazines, pamphlets, motion pictures. The series will try to present through actual examples how various groups are making use of communication media open to them.

The examples pictured on the opposite page are typical of the methods being employed at the present time. While the use of displays and exhibits is only one of the media which can be employed, it should be pointed out that this is a most effective device for attracting a maximum audience at a minimal cost.

Window displays are employed in the same way that retail stores use them. They become silent allies of the profession; regardless of the time of day, they still remain at work. Unlike speakers and demonstrators, they never become tired and the message they portray is always present for the eye to pick up.

Displays may take several forms but the thought and preparation going into the exhibit are as important as any part of the physical shape. Color, design, motion and location are all important. With proper consideration given to these factors, the finished display should reflect an increased interest on the part of those who see it.

Various devices can be used to estimate the play and appeal gained from the time and money spent in preparation. Most popular and perhaps least troublesome is that of offering a sample, pamphlet or gadget to the "window shopper." In this way you can gauge, from items distributed, the interest that the booth or window gained.

### FROM THE PUBLIC RELATIONS MAILBAG

"I think your efforts in the public relations field are top notch, and though I hate to admit it, I find myself looking across the lake to see what is going on."

E. R. THAYER, State Medical Society of Wisconsin

\* \* \*

"I am glad to see that you are going to dig into this matter (H.R. 6000). MICHIGAN is always 'way out front. The danger is much greater than most persons realize."

MARJORIE SHEARON

Shearon Medical Legislative Service

(Continued on Page 1444)



# Michigan Medical Service

## VETERANS HOMETOWN CARE PROGRAM—SUGGESTIONS

Your attention is invited to the insert that is attached to the treatment reports currently being sent out for services to be rendered through the Veterans Hometown Care Program. The insert reads as follows:

### ATTENTION DOCTOR:

May we ask for your cooperation in returning the attached papers promptly to comply with the Veterans Administration regulation as stated below:

"If the veteran fails to report, or if service is not furnished during the authorized period, the issuing office must be notified to that effect, and all papers returned. If neither the papers nor the notification referred to above is received by the issuing office within thirty days after the expiration of the authorization, the authorization will be cancelled automatically."

The delay in sending in reports increases the administrative function of Michigan Medical Service as well as that of the Veterans Administration. It should be explained that funds for treatment and examination are set up by the Veterans Administration on a quarterly period based on an estimate of the previous quarterly expenditures. If reports are held up by the doctor, it becomes a difficult task to properly estimate these funds. In order to comply with the above quoted regulation, unreported claims must be cancelled if they are not received within thirty days after the expiration of the authorization.

When a report comes in after the cancellation has been effected in the offices of Michigan Medical Service, it becomes necessary to go through a considerable amount of additional paper work to reinstate the authorization. This can be obviated

if the doctors will report the services rendered promptly, and it is equally important that authorizations for services not used, be returned after the expiration of the authorization period.

In the last case mentioned where the service was not rendered, it will be very helpful if the doctor will so indicate on the form before returning it. Frequently, claims or inquiries requesting reimbursement are received even after the form has been returned to Michigan Medical Service containing no information whatsoever indicating that treatments have been given the veteran. It is important that the papers be held by the physician until it is definitely known that the veteran will not require treatment during the authorized period. Likewise, it is equally as important to include all the dates of treatment on the form before returning it to Michigan Medical Service for payment. Once a report has been processed for payment on the strength of the information contained thereon, previously unreported treatment dates cannot be added to it.

When Requests to Continue Treatment forms are being prepared by the doctors office staff, every effort should be made to complete the form in its entirety. The items most commonly overlooked or omitted, causing unnecessary delay in the preparation of the authorization, are:

1. The code number for the type of treatment to be given.
2. The month during which treatment is to be given.
3. The condition for which veteran is to be treated.

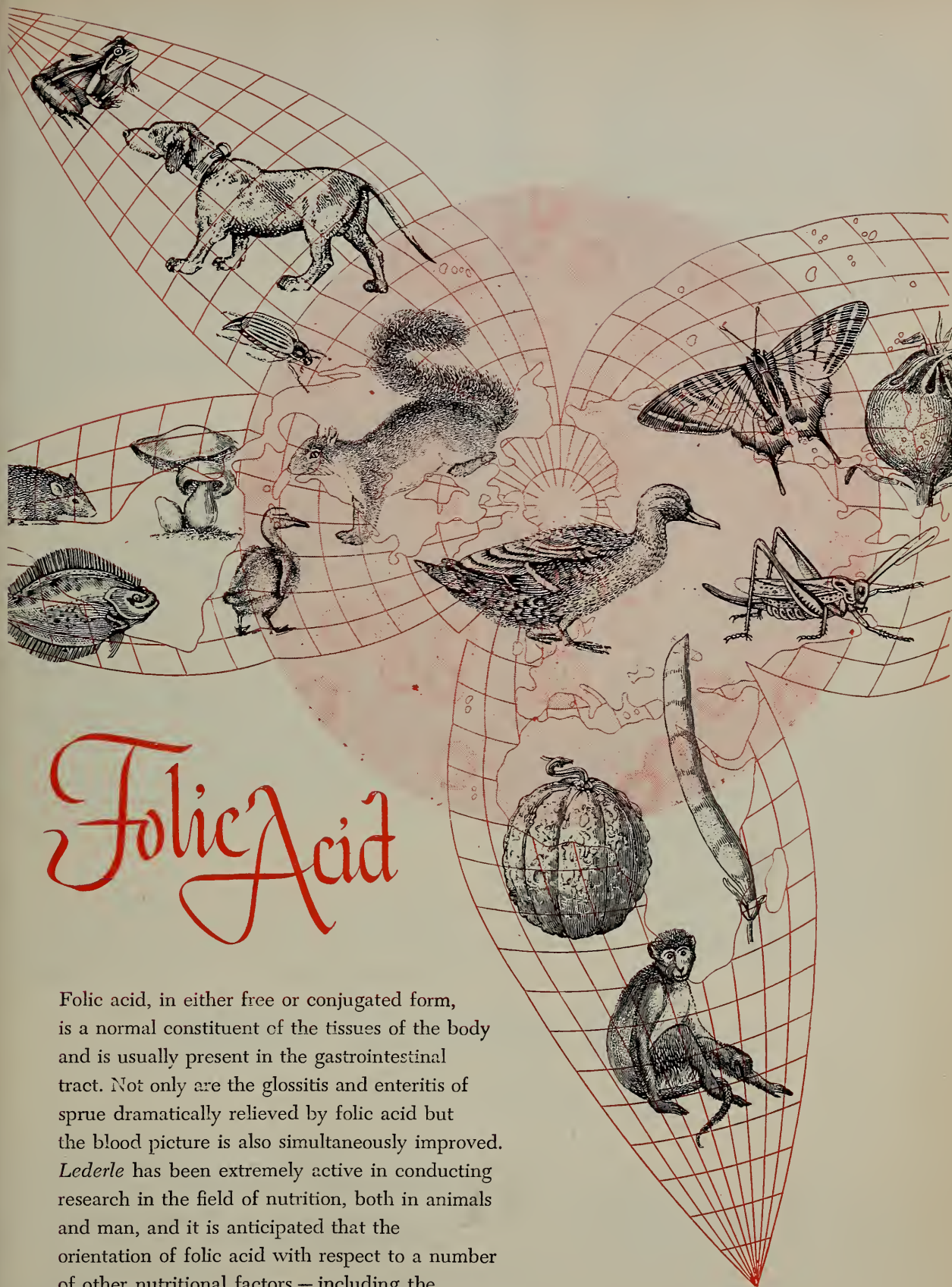
(Continued on Page 1444)

## MICHIGAN MEDICAL SERVICE—STATISTICS

Number of Subscribers, September 30, 1949.....	1,455,512
Number of Participating Doctors of Medicine.....	4,514
Number of Services Paid—Medical-Surgical Plans:	

	1949	Inception to 9/30/49
Amounts Paid for Services:	205,827	893,249

	1949	Inception to 9/30/49
Veterans Plans.....	\$ 891,833.53	\$ 3,431,595.28
Medical-Surgical Plans.....	7,077,892.08	36,964,141.54
Totals .....	\$7,969,725.61	\$40,395,736.82



# Folic Acid

Folic acid, in either free or conjugated form, is a normal constituent of the tissues of the body and is usually present in the gastrointestinal tract. Not only are the glossitis and enteritis of sprue dramatically relieved by folic acid but the blood picture is also simultaneously improved. *Lederle* has been extremely active in conducting research in the field of nutrition, both in animals and man, and it is anticipated that the orientation of folic acid with respect to a number of other nutritional factors — including the anti-pernicious anemia factor and the animal protein factor — will soon be made clear.

LEDERLE LABORATORIES DIVISION *AMERICAN Cyanamid company* 30 Rockefeller Plaza, New York 20, N. Y.



## VETERANS HOMETOWN CARE PROGRAM

(Continued from Page 1442)

Requests should be submitted within sufficient time to allow for the preparation of the authority for the next period and it is recommended that the **Request to Continue Treatment** be prepared and sent to the Veterans Administration at least seven days prior to the expiration of the current authorization period.

## MICHIGAN MEDICAL SERVICE REPORT

The report of July 31, 1949, shows Michigan Medical Service has 1,440,353 persons covered in its policies. This is still the largest group in the world even though a celebration was held in New York recently marking the assumption that that position was held by the United Medical Service of the New York area. Michigan, however, cannot hope to long occupy the foremost position because we haven't the population. We have between five and six million people to draw from whereas New York City alone has about eight million and the immediate surrounding counties which make up the area of the United Medical Service probably have another two million. In the nature of things, the United Medical Service must go ahead of us in numbers. There is a difference of 3,000 now. Michigan Hospital Service has 1,650,000 subscribers, still a little over 200,000 more than the medical service. The combined subscribers of Medical-Hospital-Surgical policies are now 65,540. It is interesting that during August, 1949, Michigan Medical Service paid the doctors for four cases where the service was rendered in 1943. The bills had never been rendered. Any other insurance company would have ignored those accounts, but Michigan Medical Service is anxious and willing to pay for the service as rendered to its certificate holders.

It has been noticed that income tax dates influence the rendering of bills and reports to Michigan Medical Service. Many times bills for November and December services are held over until January so that the receipts will be in the succeeding year. This trick eases up on the income returns for the doctor but throws the machinery of the Michigan Medical Service out of gear. Years of experience have shown that cases reported within thirty, sixty, and ninety days after services are rendered have a direct percentage bearing upon the total number of services rendered in any one month, but the experience this year shows that our formula is all out of line. For the middle months of this year, unusually large numbers of services have been reported, which is out of all proportion to our experience to the past several years. Does that mean that our doctors are sending in their bills more promptly or does it mean that we are actually rendering more services to our patrons? In the first six months of this year, we had an increase of 35 per cent in certificate holders, but we had an increase of 38.7 per cent in cases reported by the doctors. There are four categories of service which are way out of line: (1) In general surgery there was an increase of 63.7 per cent, (2) in x-ray,

58 per cent, (3) in thoracic surgery, 45.9 per cent, and (4) in otolaryngology, not including tonsillectomy, 44 per cent. But to be noted was that deliveries fell off relatively, showing an increase of only 12.6 per cent. Otology increased 17.7 per cent and herniotomies, 21.4 per cent. The other items were approximately the same as the increase in membership. Ideally, doctors should report all these cases within the month in which services are rendered, then the experience tables, the necessary reserves, and the doctor's income would be much easier to determine.

## FROM THE PUBLIC RELATIONS MAILBAG

(Continued from Page 1441)

"At a Woman's Auxiliary luncheon today our State President showed us a copy of your very eye-catching booklet, 'It's No Bargain.' In my estimation it is, to date, the best booklet that has been printed to convey to the public the bare facts about socialized medicine and I am anxious to acquire a large number."

MRS. G. F. CLAPP,  
Washington, Pennsylvania

\* \* \*

"You have done it again—in the form of your recently published pamphlet, 'It's No Bargain.' Everybody who has seen this particular pamphlet makes the comment that there hasn't been so attractive a booklet with the readability demand this has."

LEO E. BROWN,  
Medical Society of the State of Pa.

\* \* \*

"The Michigan program of Co-operation with the American People (C.A.P.) is being emulated by many other groups and organizations in the land. Latest to approach the American people from the "grass roots" level using the same plan is the NAM (National Association of Manufacturers).

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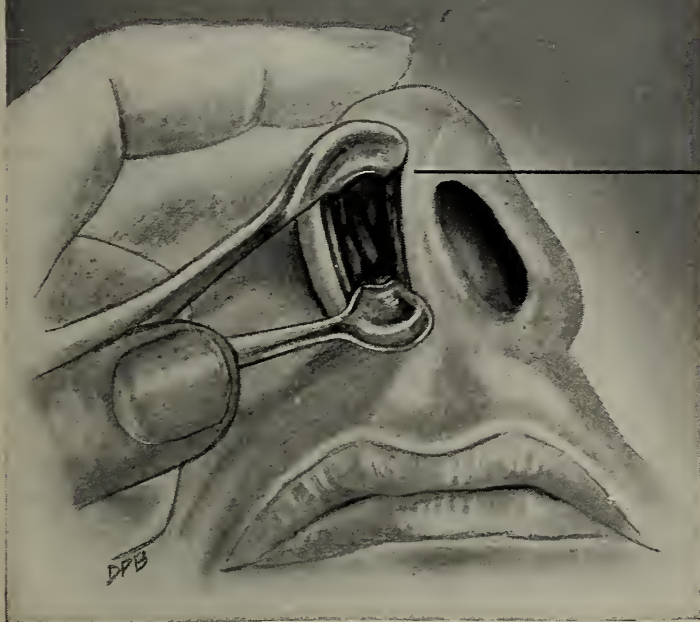
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# Editorial Comment

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## THEY KNOW NOT WHAT THEY DO

Apparently most bureaucrats have immature minds and the world has learned that immature minds in grown up bodies are dangerous. They may not facilitate the work of the devil by design but they seem unaware of the fact that he often rides to the kill on the backs of misguided "do-gooders." Thus, any government may be dispoiled by the people who provide government by the vote and fail to let those elected to office know what they believe in and what they want.

But ambitious bureaucrats, even with the voters' consent, cannot practice medicine without doctors. Physicians in possession of the necessary knowledge and skills and a clear understanding of the disastrous implications of socialized medicine should withhold their services in behalf of the people and pray for the bureaucrats on the ground that "they know not what they do."

Occasionally drastic measures are necessary to dislodge the devils mounted on the backs of evil "do-gooders." With ultimate good in mind our profession must not yield to honeycoated bunk as did our British professional brothers who now grovel in the grime of failure. Even at the expense of seeming obstinancy we must employ our humane judgment in behalf of national weal. Were not the American soldiers in Brittany using the posts that supported the crossroads crucifixes to support their telephone wires though laden with lethal messages really in the service of God?

Whether we go the way of Gibbon's Rome or whether we survive to vindicate conservative democracy we will be right. With Henry Clay we would rather be right than president, especially when the president is wrong.—Editorial, *Oklahoma State Medical Journal*, October, 1949.

## EVALUATES THE PROMISES OF MEDICAL SOCIALIZATION

In this country, the intellectual kinsfolk of the OPA ideologists are currently attacking the consumer's methods of handling his hospital and doctor bills. . . . The lack of satisfaction secured from expenditures for medical and hospital services has undoubtedly led many people to look favorably upon, or at least be willing to countenance some system of socialized medicine by which they would be forced to make payments to a government medical insurance fund. The U. S. proponents of compulsory governmental medical care have skillfully disguised the compulsion aspects by referring to their program as "National Health Insurance," which puts their drive for control of the consumers health expenditures in the best possible, though a wholly deceiving light.

Following a critical analysis of prospective costs and values returned under the proposed plan the editor asks pertinently:

Do U. S. consumers want to give the Power to "Society" or the federal government . . . to decide just how much of their income MUST be sent to the U. S. Treasury for medical care? Can they judge from the sales claims whether the new product will be better than the one they are now using? The decision is now in their hands, but it will be in the hands of politicians if consumers do not seriously, and promptly concern themselves with the problem.—Editorial, *Consumers Research Bulletin*, September, 1949. .

## IT'S YOUR MOVE, DOCTOR

The English physicians lost their battle against Socialized Medicine because they were too polite to fight. This inertia proved a costly blunder, as most of the British physicians now admit. A stiffer fight may have prevented the chaotic condition now existing and lightened the taxes not only here but also in the British Isles.

State Medicine strictly is a political battle. Most physicians are against it but to date only a handful have done anything about it. A campaign of this nature requires more than all the Whitaker and Baxters in the country; it requires the combined co-operation of us all. The campaign requires the individual efforts of every American physician. The battle will not be won in Washington but by convincing patients and friends at home that State Medicine is bad medicine for the country. To do this every physician must know the facts, pro and con, as well as he knows the symptoms of appendicitis. It is the grass root strategy of campaigning in the local community that "brings home the bacon."

Many physicians think that they are too big to resort to grass root politics; others let it be known that they are so absorbed in the practice of good medicine that they cannot be bothered. We admire everyone who has the welfare of the public at heart but a new variable has been added to alter the picture. In our opinion, State Medicine lowers the standard of medical care and in this respect should stimulate the most conscientious physician to remove his gloves and get in and pitch. Nowadays a physician must be more than a good doctor if he wants to remain a free doctor.

We live in a free country but actually our fate rests in the hands of 435 congressmen and 96 senators. In other words, if we want the politicians to be interested in our cause, we must be interested

(Continued on Page 1450)

If she is one  
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# Cancer Comment

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## FIRST MICHIGAN CANCER CONFERENCE

On October 11, 1949, the First Michigan Cancer Conference was held in Lansing. One hundred and twenty-five representatives of lay and professional organizations were in attendance. The purpose of the conference, which was sponsored by the Michigan State Medical Society, Michigan Department of Health and the two Michigan Divisions of the American Cancer Society, was to acquaint those in attendance with the nature and extent of the cancer problem in Michigan; and to invite the support of all organizations in a program of cancer control in their own communities.

A. E. Heustis, M.D., Commissioner of Health, in discussing the cancer problem in Michigan, emphasized its importance as the second cause of death and the part it plays in planning health programs in local health unit organizations. The widespread public interest in cancer control is stimulating national, state and local health agencies, both public and private, to give more consideration to the problem than ever before.

As cancer is now a reportable disease in Michigan, in time the development of a registry of known cancer cases may be expected. Such a registry will be of prime importance in furnishing information on the incidence and prevalence of cancer, information almost totally lacking at this time. The study of new and promising diagnostic tests gives promise of having available methods of examining large numbers of people in a minimum of time.

A. A. Humphrey, M.D., of Battle Creek, described cancer detection centers and their method of operation. For many practical reasons these centers have not fulfilled the hopes that attended their early development. Their limited capacity, their partial examination procedure requiring the one examined to consult some other physician whenever any suspicious lesion was discovered, and the high cost of each cancer found were among the reasons why detection centers as at present organized could not be expected to solve the problem of early diagnosis in the communities where located.

Dr. Humphrey emphasized that no matter

where cancer detection examinations are made, in detection centers or physicians' offices, their value will not be determined by environment or available equipment but by the ability of the examining physician to understand and interpret his findings.

A. W. Strom, M.D., of Hillsdale, reported on the Hillsdale Plan for Tumor Detection that has been in operation in that county since January 1, 1948. Approximately 100 cancer detection examinations per month are made in physicians' offices during office hours. By appointment, anyone can secure this examination by his own physician for the regular fee for such service. Records of all examinations are filed confidentially with the county health department where they are available for statistical analysis.

The examination is confined primarily to the oral cavity, skin, breast, pelvis, rectum and prostate, although any suspicious findings elsewhere are followed to a definite conclusion. Cancer has been found in 3.5 per cent of those examined. Sixty per cent of the cancers found were in early and probably curable stages compared to practically no early cases found among those ill at home or hospital.

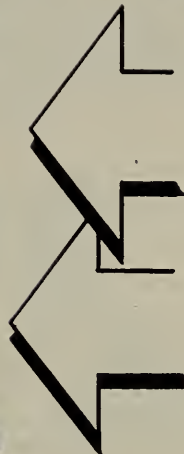
Dr. Strom stated that this program has stimulated participating physicians to a much keener interest in cancer diagnosis and treatment; and that by this Plan a more effective effort than ever before has been exerted in detecting and successfully treating cancer in that center.

Mr. Don E. Johnson, of Flint, discussed lay interest in cancer, and the part laymen must play in its control. Education remains the chief means of controlling cancer. Unless and until laymen are convinced that their only hope of escaping the serious consequences of their cancer is to seek periodic medical examination, little headway will be made in controlling the disease.

Mr. Johnson pointed out some of the responsibilities of the physician in the cancer control program. Among these responsibilities are those of educating the public, of being sympathetic to the interests and questions from the public, and to keep abreast of newer developments in diagnosis and treatment so as to offer their cancer patients the best service that science has provided.

*(Continued on Page 1450)*

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## FIRST MICHIGAN CANCER CONFERENCE

*(Continued from Page 1448)*

The formal program was concluded by Norman F. Miller, M.D., Ann Arbor, who offered a plan for the extension of the Hillsdale Plan to cover the entire state. He invited the co-operation of all health-minded individuals and groups to unite in making this program a reality in every county. He stressed the point that the proposed program need not interfere in any way with existing programs for cancer detection but could well serve those areas where no cancer detection programs had been set up.

It was recommended that each organization represented at the Conference appoint a representative to an advisory committee to the Cancer Control Committee which would explore the social, economic, educational, and other aspects of the cancer problem, and that reports on these studies be made to future similar conferences. Also that each one present urge the value of periodic medical examination on his friends and as a part of every pre-employment examination in industry. Such a program as outlined will place Michigan in the forefront of all cancer control programs in the United States and will, in time, give Michigan the lowest cancer mortality of any state.

Following luncheon, a question and answer period served to further explain the advantages of the Hillsdale Plan and to clear other points in the general cancer control program.

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The periodic medical examination is the closest thing there is to cancer prevention.

\* \* \*

The control of cancer is a co-operative undertaking between the public and the medical profession. All the scientific forces of the world are powerless in the control of cancer unless and until the public takes advantage of them.

\* \* \*

Physicians cannot compel anyone to accept examination and treatment for cancer. Such services must be freely sought by the patient.

\* \* \*

The physician's responsibility as a member of society is greater than that of any other group of citizens, because of the privilege of service in the field of physical and mental well-being that his medical training permits.

\* \* \*

Mystery and fear are the ruling emotions in the savage or primitive mind. Civilization is achieved in large measure by the extent to which knowledge and hope replace mystery and fear. A long and important step will have been taken in cancer control when the greatest pos-

sible number of people have lost their fears and misconceptions of cancer through education and have become aware of the nature of the disease and the measures necessary for its control. Therefore, education remains—as it always has been—the most important element in the control of cancer.

\* \* \*

More recent studies of surgically removed thyroid glands have demonstrated that cancerous tissue may be concealed in a symptomless goiter.

\* \* \*

Nodular goiters in children are often malignant; the frequency of neoplastic change ranges from 19 to 40 per cent in different series of pre-adolescent children with this type goiter.

\* \* \*

Radioiodine is being employed with varying degrees of success in the diagnosis and treatment of carcinoma of the thyroid gland. Several more years must elapse, however, and a great deal of work must be done before the clinical usefulness and the ultimate value of this substance can be properly evaluated.

\* \* \*

The vast majority of tumors can be biopsied without harming the patient.

\* \* \*

If physicians were to avoid incising suspicious lesions to obtain a biopsy then the early diagnosis of cancer would be impossible.

\* \* \*

Clinical improvement has been noted in 80 to 90 per cent of Hodgkin's disease treated with nitrogen mustard. Remissions may last from two weeks to more than a year.

\* \* \*

Cancer of the gingiva has one of the highest rates of metastases of all oral cancers.

\* \* \*

Cancer confined to the stomach has a five-year survival rate of 50 per cent; if metastases to regional lymph nodes are present, the five-year survival rate drops to 5 per cent.

## IT'S YOUR MOVE, DOCTOR

*(Continued from Page 1446)*

in theirs. It has been reported that in one city approximately one hundred physicians were not registered and could not vote if they wanted to. Inertia was also evident in the 1948 campaign. A plea for campaign money was sent by a republican organization to physicians in a certain county in Illinois. Not one of them responded even though it meant sending a loyal supporter to Congress. What would you think if you were a congressman and were asked to help a cause in which the constituents involved showed absolutely no interest? In the 1950 elections let us remember that it is easier to settle issues at the polls than in Congress at a later date.—Editorial, *The Illinois Medical Journal*, October, 1949.

For mixed infections

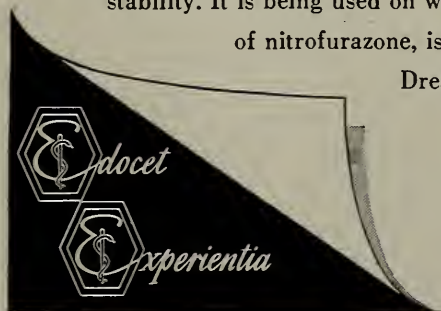


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# Political Medicine

## DON'T RUSH HEALTH PLAN, SPONSOR SAYS

Senator Humphrey (D., Minn.), a sponsor of President Truman's national health-insurance program, said that Congress must defer action on it pending further study and the enactment of related health measures.

The Minnesota lawmaker said he always has believed in the social-security principle of the proposed insurance program.

But he added that until the "practical difficulties" of administering the hotly disputed plan have been met, "legislative action might well be a disservice to the principle in which we believe."

Humphrey indicated he expects no final Congressional action on the bill next year. He thus lined up with two other sponsors of the measure who look for it to stay on the shelf through 1950.

They are Senators Thomas (D., Utah) and Murray (D., Mont.).

Humphrey set forth his views in a statement known to have been prompted by reports he was withdrawing his support from Mr. Truman's health-insurance program.

The program calls for bringing about 120,000,000 Americans under an insurance plan which the sponsors estimate would cost about \$6,000,000,000 a year.

It would be financed by a three per cent payroll tax, split between employe and employer, on the worker's first \$4,800 of annual income.

The American Medical Association and other foes of the program have contended it would lead to socialized medicine. Backers of the idea argue it is the best way to provide adequate medical care at a reasonable cost.

## COSTS OF COMPULSORY HEALTH INSURANCE

Comdr. Paul R. Hawley in *Blue Print*, Blue Cross Commission, says the cost of compulsory health service is being kept secret by the Federal Security Agency. He writes:

"By two independent methods of approach to the problem, careful investigators have estimated the cost to be \$100 per capita per annum when the program is in full operation. This is \$15,000,000,000 a year. "The payroll deductions and employer contributions fixed by the Federal Security Administration will produce \$6,000,000,000 per year. Thus the contributions to the fund will pay no more than 40 per cent of the cost.

"Here I would point out that this huge cost is not for necessary medical care but largely to satisfy the capricious desire for medical attention for inconsequential ailments.

"In the present state of our national budget, can any intelligent citizen advocate adding \$9,000,000,000 per year for the sole purpose of gratifying the demands of neurotics, malingerers, and chiselers?" (*The Christian Science Monitor*, Sept. 1, 1949)

## SOCIALIZING INSURANCE

*The United States is headed down the road to Socialism, and the insurance business will be the first to come under its rule.* That bitterly unpalatable warning was made here by Senator Byrd at the annual meeting of the National Association of Insurance Agents. The Virginian's ominous words are the more credible because we've had a preview in this country during the past decade of socialized insurance.

For example, take social security. That New Deal device collects periodic payments from the individual and, if he lives long enough, restores this money and more in the form of old age insurance. Annuities do exactly the same thing. The difference is that social security is government-operated and imposes an equal contribution upon the employer; annuities are privately operated and each individual shoulders his own burden.

\* \* \*

In the circumstances Senator Byrd's warning should provoke no skeptical retort. Not only is the insurance business headed down the road to Socialism, but its nose is already through the door.—*Chicago Journal of Commerce*; Oct. 3, 1949.

## SENATOR HUBERT H. HUMPHREY AND VOLUNTARY PREPAYMENT PLANS

Senator Humphrey has changed his mind. He now says voluntary health plans should be aided and encouraged. Before this nation adopts compulsory health insurance, it should enact laws on Federal aid for medical education and local public health units; expansion of medical research, hospital construction, and the maternal and child health programs. He thinks the time is ripe for an extension of social security, but that the medical profession, the consumer, and the government should work together to bring voluntary prepayment plans to the peak of efficiency and economic soundness.

"Those of us who favor the principle of social security insurance recognize the practical difficulties of a nationwide program of health insurance that would directly affect the lives of every citizen in this nation. We understand that until these practical difficulties of administration are met, legislative action might well be a disservice to the principle in which we believe. . . . It is my considered judgment, therefore, that legislation for health insurance is not yet in the legislative action stage and will not be in that stage, regardless of its merits, until there have been further hearings, further research and until a primary basic administrative formula has been developed. . . . In view of the great need not now being met by existing voluntary plans, I urge upon the medical profession and the consumer the improvement of voluntary health plans and the extension of co-operative medicine, group health programs and the development of health services for industrial workers through the processes of collective bargaining."

# The JOURNAL

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## Subacute Bacterial Endocarditis

By George E. McKeever, M.D., and  
Solomon G. Meyers, M.D.  
Detroit, Michigan

WITH THE advent of penicillin therapy there has been made available an effective agent for the treatment of bacterial endocarditis. During the past five years penicillin therapy of this disease has been universally accepted as the treatment of choice. By the use of penicillin over 50 per cent of all cases may be cured!<sup>2</sup> The rate of spontaneous recovery has been established at from 1 to 3 per cent.<sup>7,11</sup> It is generally agreed that best results will be obtained with early diagnosis followed with massive doses of penicillin over a long period of time.

Abstracts are presented of two cases treated successfully at Harper Hospital recently.

*Case 1.*—Mrs. A. K., a sixty-four-year-old white woman, entered Harper Hospital on June 25, 1948, because of sudden onset of substernal pain. There was no shortness of breath. Anorexia with a 15-pound weight loss had occurred during the last year. Physical examination revealed an elderly white female with slight pallor and in moderate distress. The temperature was 100.4° F. Lung fields were clear. The heart size was within normal limits with a rate of 92 and the rhythm regular. A loud systolic murmur was heard at the apex with transmission to the axilla and sternum; the pulmonary second sound was accentuated. Blood pressure was 160/90. The red blood count was 4,080,000 per cm. and the hemoglobin was 10.5 gm. or 68 per cent. Leukocytes numbered 9,600 per cm. with 86 per cent polymorphonuclear cells, 11 per cent lymphocytes, and 3 per cent monocytes. Hypochromasia and anisocytosis were noted. The sedimentation rate was 111 mm. per hour. A

urine examination revealed a 3-plus albumin, 1 to 6 white blood cells per high power field, and 1 to 4 red blood cells per high power field. Electrocardiograms on June 26 and June 28 were normal. A chest x-ray showed slight cardiac enlargement in the ventricular area, and definite increase in the length and caliber of the aorta. X-rays of the gall bladder, gastrointestinal tract and lumbar spine were normal.

By the fifth hospital day, it became apparent that the outstanding feature of the patient's illness was fever, of which the patient was unaware. The temperature had averaged 102° F. for the first five hospital days. The fever, systolic murmur, weakness, weight loss, anemia, and the increased sedimentation rate suggested the diagnosis of subacute bacterial endocarditis. There were no petechiae or Osler's nodes, and the spleen was not palpable. By the twelfth hospital day, four blood cultures were found to be positive for streptococcus viridans, establishing the diagnosis of subacute bacterial endocarditis.

The patient was started on intramuscular aqueous penicillin, 100,000 units every two hours. The daily dosage and frequency of administration was changed a few times, but the dose ranged from 1.2 to 2.4 million units per day. The organism was found to be sensitive to 0.15 units of penicillin per c.c. *in vitro*, thus showing considerable penicillin sensitivity. The patient continued to have slight daily elevations of temperature to 99° F. despite penicillin therapy. On the thirty-sixth hospital day, the patient threatened to leave the hospital unless the frequency of injections was decreased, and the interval between injections was lengthened to three hours with no change in the total daily dose. At this point oral caronamide was begun in doses of 12 grams daily in divided doses. A marked increase in the penicillin blood levels was noted after the addition of caronamide. Before starting caronamide, penicillin blood levels ranged from .084 to .528 units per c.c. of serum. While on caronamide, the penicillin blood levels rose to from 5.215 to 7.936 units per c.c. of serum. The rest of the hospital stay was uneventful except for occasional low back pain and soreness of the buttocks from penicillin injections. By August 6, the patient was feeling well, having gained 4 pounds in weight. Seven consecutive blood cultures were negative. A total of 54.4 million units of penicillin had been administered during a thirty-two-day period.

From the Department of Medicine, Harper Hospital, Detroit.



At home the patient's course was completely uneventful. She continued to take oral caronamide in the same dosage. The family physician administered 600,000 units of procaine penicillin in oil (300,000 units in each buttock) daily for thirty-four days after discharge from the hospital. These injections were given at a daily visit which the patient made to the doctor's office. A blood count during the course of the home treatment was normal and a blood culture was negative. The patient was last examined on January 17, 1949, 130 days after discontinuance of treatment. She appeared and felt well. The temperature was normal and she had gained twelve pounds in weight since entrance to the hospital. Physical examination was normal except for the previously noted systolic murmur at the apex. Blood pressure was 180/100. The red blood cell count was normal with a hemoglobin of 83 per cent. The sedimentation rate was 47 mm. per hour. Urinalysis showed a trace of albumin. A blood culture 130 days after discontinuance of treatment was negative.

*Comment.*—The outstanding features of this case are:

1. Approximately one-half of the treatment was carried out in the home.
2. Penicillin levels of .528, .256, and .084 were elevated to 7.9 and 5.2 units per c.c. of serum by the addition of caronamide, using approximately the same dose of penicillin.

*Case 2.*—Mrs. S. K., a twenty-six-year-old white woman, entered Harper Hospital on July 23, 1948, because of weakness, malaise, ease of fatigue, and low grade fever. The patient had been well until six months prior to admission, when she first noted fatigue and headaches. About six weeks before admission the patient noted a furuncle on the surface of her nose. One month prior to admission she developed anorexia and nausea. One week before admission she developed a low grade fever of 100° F. There was a definite history of rheumatic fever at the age of six years, with no recurrences. A cardiac murmur was known to be present since adolescence.

Physical examination revealed a well-developed, well-nourished woman in no acute distress. The heart was slightly enlarged, the left border of cardiac dullness being just to the left of the midclavicular line in the fifth intercostal space. There was accentuation of the first heart sound at the apex. A systolic murmur was heard at the apex with radiation to the left axilla. The pulmonary second sound was accentuated. No diastolic murmurs were heard. Blood pressure was 88/50 and pulse was 80. The spleen was palpable on deep inspiration. No petechiae were noted. There was no tenderness of the fingertips. The patient ran a low grade fever, averaging 100° F. A diagnosis of rheumatic heart disease was made and studies were undertaken to determine if subacute bacterial endocarditis was present. A hemogram showed minimal degree of normochromic normocytic anemia and a leukocy-

tosis of 12,000. The sedimentation rate was 40 mm. per hour. A urinalysis was normal. An electrocardiogram was suggestive of myocardial damage. Chest x-ray showed prominence of the left auricle and a short left cervical rib.

By July 31, the ninth hospital day, eight consecutive daily blood cultures had been found positive for staphylococcus albus. The organism was coagulase positive. A search was made for a septic focus. The urinary tract was studied by intravenous and retrograde pyelography and was normal. No staphylococci could be found in urine cultures. Clinical and radiologic examinations of the teeth were normal. Gall-bladder x-ray showed a radio-lucent shadow within the gall bladder which was thought to be due to a polyp of the gall bladder. X-rays of the upper gastrointestinal tract were normal. Ear, nose, and throat, gynecological, and proctological consultations were unfruitful in locating a focus of infection. A diagnosis of subacute bacterial endocarditis caused by staphylococcus albus was made.

The organism was found to be sensitive to 2.5 units of penicillin per c.c. *in vitro*, showing a high penicillin resistance. Treatment was begun on July 31 with 200,000 units of aqueous penicillin intramuscularly every two hours, a total daily dose of 2.4 million units. At the same time, 12 grams of caronamide was given daily in divided doses. On August 9, an urticarial rash appeared on the knees and elbows and a measles-like rash on the trunk. This was interpreted as a drug rash due to penicillin. The dosage of penicillin was cut down to 100,000 units every three hours and pyribenzamine (an antihistaminic) was administered. The rash progressed until August 12, and then subsided. On August 17, the daily penicillin dosage was boosted to 1.2 million units daily, on which she was maintained until procaine penicillin in oil was begun on August 31. Negative blood cultures were drawn on August 4, 7, and 10. During the eleventh day of treatment the patient refused the penicillin injections and there was a resultant ten-hour break in the treatment. Blood cultures taken on August 14, 17, and 18, were again positive for staphylococcus albus. The patient was started on streptomycin in addition to the penicillin on August 21, because of failure to sterilize the blood stream with large doses of penicillin. She received an average of 2.4 grams of streptomycin daily intramuscularly until September 10, at which time it was discontinued because of severe vertigo. Cultures were negative after August 18. As the patient's condition improved, her morale declined, so much so that the problem of persuading her to remain in the hospital to complete the course of treatment became a major one. It was, therefore, planned to start the patient on procaine penicillin, 2 c.c. twice daily, with the objective of carrying on this regime at home after discharge from the hospital. A decided increase in penicillin blood levels was realized after changing to procaine penicillin, even though the same daily dose was used. The blood levels rose from the levels of 2 to 4 units before procaine penicillin to 8 to 10 units per c.c. while on procaine penicillin. The remainder of the hospital stay was uneventful. She was discharged on September 10, to continue with the penicillin therapy at home as

planned. A total of 61,150,000 units of penicillin was given during forty-two hospital days.

The patient's course at home was uneventful. She was seen twice daily by the visiting nurse and given intramuscular procaine penicillin in doses of 1.2 million units daily for the first sixteen days (1 c.c. in each buttock twice daily), and 1.8 million units for the subsequent twenty-five days (1½ c.c. in each buttock twice daily). The vertigo, which began in the hospital, presumably from streptomycin, persisted for a few days and disappeared. She remained afebrile and symptom-free. Five blood cultures were obtained by having the patient visit the hospital laboratory approximately once weekly during the course of her home treatment. These were all negative. Serum penicillin levels were checked six times and ranged between 2 and 8 units per c.c. of serum. While on 1.8 million units of penicillin per day, they ranged from 3.9 to 8 units per c.c. of serum. The last day of treatment was October 21, 1948. The duration of home treatment was forty-one days which followed hospital treatment of forty-two days. The total dose of penicillin was 116.5 million units. The total dose of streptomycin was 47.6 grams, given over a twenty-day period. The patient was last examined on January 11, 1949, eighty-two days after the termination of treatment. Physical examination resulted in normal findings except for a slightly enlarged heart, with a systolic murmur at the apex. The tip of the spleen was still barely palpable and tender. Temperature was normal, blood pressure was 110/60, and the heart rate was 68. She had gained 10 pounds in weight, and looked well. The red and white blood counts were normal, with a hemoglobin of 86 per cent. The sedimentation rate was 25 mm. per hour. Urinalysis was normal. Blood culture was negative.

#### *Comment.—*

1. Although *Staphylococcus albus* is an unusual cause of subacute bacterial endocarditis, it has been thus described.<sup>19</sup> The locus of entrance was probably the furuncle on the nose, which had disappeared by the time of admission. Eight consecutive blood cultures were positive for the organism and its pathogenicity was demonstrated by the positive coagulase test.

2. Intermission in treatment, when the patient refused injections for a ten-hour period, caused the cultures to become positive after having been negative three consecutive times.

3. The development of penicillin sensitivity as manifested by extensive rash did not deter us from continuation of therapy because of the serious nature of the patient's illness. The dosage was decreased, pyribenzamine given, and it was found possible to continue treatment and later on even to increase the dose.

4. The co-operation of the patient was best secured by infrequent use of procaine penicillin in oil.

5. The treatment was prolonged by carrying out the last half of the treatment at home, the visiting nurse continuing daily penicillin injections.

6. Control was maintained by weekly visits to the hospital laboratory.

7. The levels obtained with procaine penicillin in oil and oral caronamide were as high as could be achieved with frequent intramuscular aqueous penicillin in the hospital.

#### Discussion

Subacute bacterial endocarditis is currently being diagnosed earlier in the course of the disease because of an alertness as to its possibility, early hospitalization, and repeated blood cultures. The classical clinical picture will be seen less frequently, as efficacious treatment is available early in the course of the disease, and the diagnosis will rest more on early clinical phenomena plus bacteriologic findings and less on the clinical phenomena associated with the advanced stages of the disease. Early diagnosis will pay substantial dividends in lower mortality and morbidity.

Many papers have advocated continuous intravenous drip as the route of choice for administration of penicillin. The objectionable features of that method are obvious. Jones and Tichy have pointed out that there has been no significant differences in results by the various modes of administration.<sup>5</sup> Rather, results are governed by the length and intensity of treatment. A definite advance in treatment, as far as patient comfort is concerned, was established by the use of penicillin in oil. Geiger and Goerner<sup>3</sup> reported cures in two patients using daily injections of penicillin in peanut oil and beeswax. A third patient who could not be cured on massive doses of penicillin was maintained asymptomatic and with a sterile blood stream by daily injections on an ambulatory basis. As a result of their success, they suggested that home care could be possible with adequate supervision.

The use of caronamide makes it possible to maintain high penicillin blood levels with relative ease. Caronamide by its action on the renal tubular epithelium inhibits the excretion of penicillin in the urine. The only toxic reactions noted have been those of nausea and vomiting in some patients. Caronamide is closely related to the sulfa drugs and may in the future prove to have more toxic potentialities.<sup>8</sup> It should be mentioned that the caronamide excreted in the



urine is precipitated by a low pH. Therefore, tests for albuminuria, using acid solutions, may give false positive test for albumin in the urine.

With the use of the longer acting penicillin preparations, supplemented by oral caronamide, a certain portion of a long course of treatment may be carried out in the home. The economic burden may be considerably lessened by this plan. An initial period of hospitalization for diagnosis and observation and a trial of treatment should be undertaken. The length of this period would have to be determined on an individual basis. Most patients could then be discharged for home care under supervision. The visiting nurse can be used to administer the medications or the patient can come to the physicians's office. Follow-up laboratory work may be carried out on an ambulatory basis. It is felt that a much shorter period of initial hospitalization than was used in the two cases reported may be quite satisfactory in certain selected cases.

It is necessary to establish the sensitivity of the organism to penicillin *in vitro* before treatment is begun. This is done to determine if the pathogen can be eradicated with penicillin and also is an index to the dosage needed. The sensitivity may be rechecked during the course of treatment. An increase in resistance of the infecting agent is rare, but may occur.

The only method available of deciding whether or not a cure has been accomplished is by a period of observation after a course of treatment.<sup>5</sup> The sedimentation rate, fever, and white blood count are not valuable as indications of a cure.<sup>1,9</sup> Negative blood cultures do not establish a cure. In a series of autopsies of fatal cases of subacute bacterial endocarditis, nine out of ten were thought to have had sterile blood streams. Of these ten, eight were found to have viable bacteria in the vegetations.<sup>4</sup> If, after a period of four to six weeks, the patient remains well and afebrile, a cure may be assumed. The longer the patient remains well, the more certain the cure.

The prognosis of subacute bacterial endocarditis depends on early diagnosis, vigorous treatment, the presence of a penicillin-sensitive organism, and mechanical factors in the heart. Embolic phenomena and cardiac failure may cause death after the heart valve has been sterilized. Relapses usually occur within thirty days and are rare after fifty days.<sup>5,9</sup> The chances of reinfection are prob-

ably no greater than the chance of the original infection.

### Summary and Conclusions

1. Two cases of subacute bacterial endocarditis, one with streptococcus viridans, the other with staphylococcus albus, both treated successfully, are reported.
2. Early diagnosis, based on early clinical phenomena plus bacteriologic confirmation, rather than on late clinical phenomena, will decrease the mortality and morbidity due to this disease.
3. The trends in treatment are toward more massive doses of penicillin and longer duration of treatment.
4. Treatment at home, using procaine penicillin in oil and caronamide, was effected in the two cases after an initial period of treatment in the hospital. This is a very practical addition to the treatment for it allows prolongation of treatment, fewer injections, less expense, and more comfort to the patient.

ADDENDIUM: The patients described in Cases 1 and 2 were contacted just prior to publication of this article. They were found to be well fourteen and one-half and thirteen months, respectively, after cessation of treatment.

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The freshman class in the medical schools of the United States soon will exceed 7,000 students compared with an average of 6,016 in the ten years prior to the war.—New York Times, Sept. 5, 1949.

# Bacterial Endocarditis Caused by a Hemolytic Staphylococcus Albus

## Treated With Aureomycin

By Arthur W. Allen, M.D., and  
Herman H. Riecker, M.D., F.A.C.P.  
Ann Arbor, Michigan

THIS CASE of subacute bacterial endocarditis is one of unusual interest because of the presence of a relatively rare pathogen—hemolytic staphylococcus albus<sup>8</sup>—the type of aortic valve deformity, perforation of the intraventricular septum with resultant involvement of the tricuspid valve, and embolic showers in both the pulmonary and systemic circulations. At no time did the patient have splenomegaly or significant hematuria, and the usual secondary anemia did not appear until the terminal phase of the illness. No evidence was found of pre-existing congenital or rheumatic heart disease. The total illness lasted fourteen weeks, a duration most unusual for this organism before the advent of the more recent antibiotics.<sup>7</sup> Finally, this case study illustrates the necessity of determining the resistance or susceptibility of the recovered organism to the various antibiotics now available for successful treatment of this disease.

### Case Report

V. S., a forty-three-year-old white man, had a sudden onset of lumbar pain and pain in the toes and ankle of the right foot on August 1, 1948. There was no antecedent upper respiratory tract infection. Within five days he developed a fever of 103.6°. He was seen by a physician on August 6, for what seemed an intestinal infection, for which he was given sulfaguanadine. On August 9, he developed dyspnea and an apical systolic murmur thought not to have existed on physical examination one year previously. On August 11, following a course of sulfaguanadine totaling 30 grams, he returned to work, but on August 13, he again became febrile and was then given oral penicillin. Fever continued, and on August 17, he had a sudden onset of severe "jabbing" pain in the right upper quadrant and some pain in the right ankle.

On admission, August 18, he complained of dull aching right upper quadrant pain. The patient stated he had had exertional dyspnea for several years, but industrial health examinations and a life insurance ex-

amination within the last five years had not disqualified him for work. He had experienced no chest pain or sudden severe dyspnea unassociated with exertion at any time. He denied rheumatic fever as a child but admitted he was frail and that he had scarlet fever at the age of eleven with residual deafness in the left ear. *It should be noted that a daughter and nephew have rheumatic heart disease.*

Initial examination revealed a powerfully built, well-nourished male who appeared acutely but not seriously ill. He had no cyanosis, orthopnea or petechiae. His blood pressure was 125/70, and his temperature and pulse were 100.4° and 106, respectively. There was almost complete deafness in the left ear. He was edentulous, the throat was not remarkable, and no lymphadenopathy was noted. On having him sit up, a head nod was seen and an aortic thrill was palpable. There was a loud systolic murmur over the aortic area with transmission to the great vessels on the right. This murmur was heard also throughout the precordium. In addition, there was a blowing diastolic murmur in the second intercostal space on the right, an apical systolic murmur and a diastolic murmur in the mitral area, the former referred to the left axilla, in retrospect caused by dilatation of the left ventricle, and secondary to an aortic stenosing lesion.<sup>5</sup> The left border of cardiac dullness was beyond the midclavicular line. The rhythm was regular. Both lungs were clear to auscultation and percussion, but excursions of the right diaphragm were limited. The liver was felt 1 centimeter above the umbilicus in the right midclavicular line and was not tender.

Examination of the extremities showed definitely clubbed fingers and toes, which the patient and relatives stated to have been present all his life. No edema was noted. There was a small, tender and erythematous nodular lesion on the right instep.

The original urinalysis was not remarkable, the Kahn test was negative, the erythrocyte sedimentation rate was 25 mm. per hour, corrected, and the leukocyte count was 21,850, with severe toxic granulation of the 87 per cent polymorphonuclear leukocytes. Agglutination tests for typhoid fever and undulant fever were negative in all dilutions, and the heterophile antibody titer was 1:32.

A long-distance film of the heart showed an increase in density above the diaphragm on both sides but no definite fluid, a fairly prominent aortic arch, and a slightly enlarged cardiac shadow. A blood culture obtained the day after admission showed a few colonies of hemolytic staphylococcus albus, and penicillin therapy was begun, with the tentative diagnosis of acute bacterial endocarditis.

The liver was not palpable after the first day. Penicillin reduced the degree of fever but a fastigium of 99.4° prompted an increase of penicillin dosage to 2,200,000 units daily in addition to caronamide (Staticin—Sharp and Dohme).<sup>2</sup> On the eleventh hospital day the dosage was increased to 3,200,000 units each day, and on the seventeenth day to 6,400,000 units daily.

The Michigan State Laboratory had reported the organism to be hemolytic staphylococcus albus with a penicillin sensitivity of 12.5 units. Urticaria developed

From the Medical Service of St. Joseph's Mercy Hospital, Ann Arbor, Michigan.



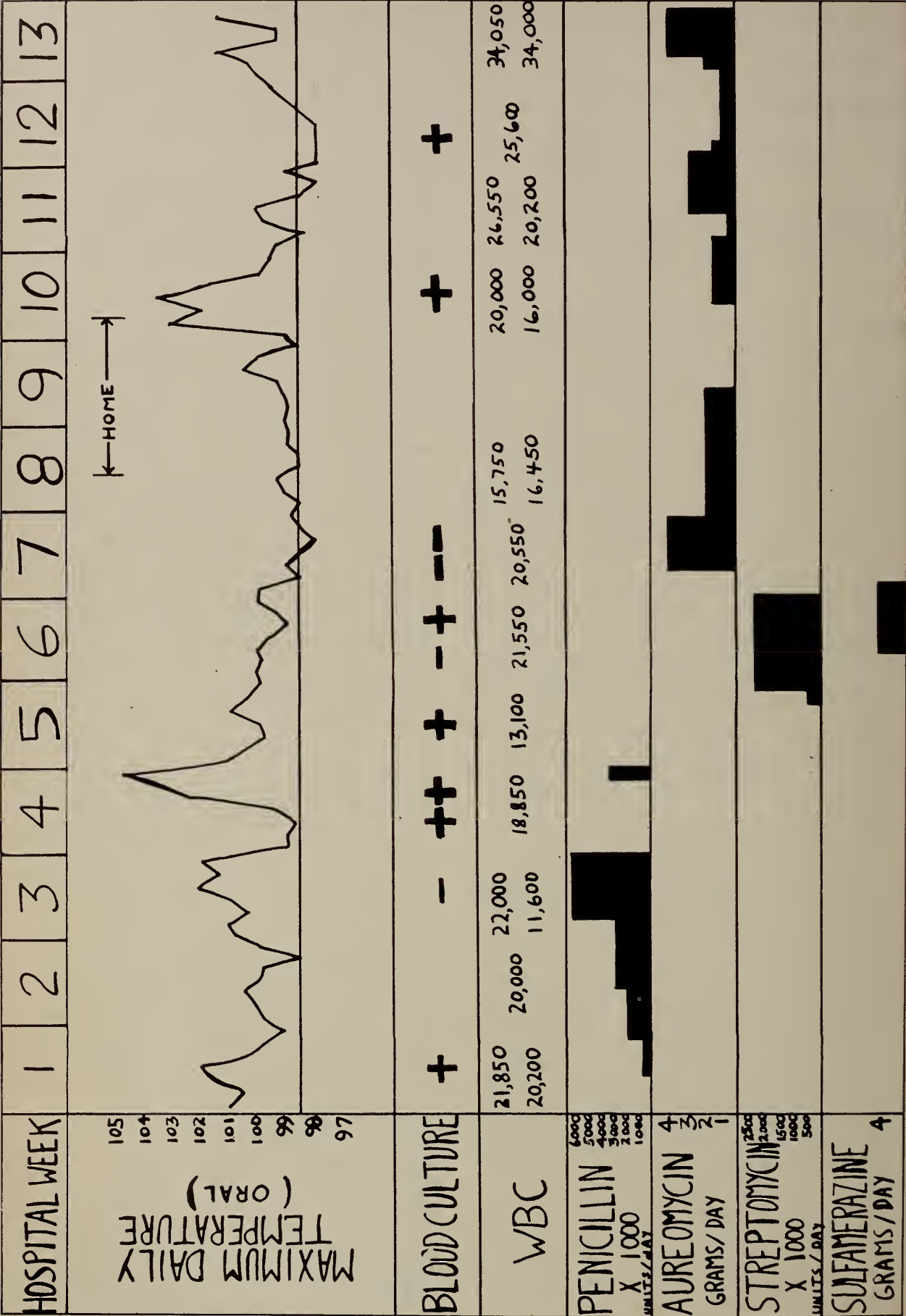


Figure 1.

during this therapy and the temperature gradually rose despite a fall in the leukocyte count and a negative blood culture (Fig. 1). On September 6, a phenosulfonphthalein test showed only 25 per cent excretion in two hours, from which datum it was inferred that effective tubular blocking of penicillin by caronamide had been achieved, after the method of Boger,<sup>2</sup> renal disease having been excluded by previous normal urinalysis and a blood urea nitrogen of 15 mg. per 100 c.c.

The patient had reported on September 5 the onset of dull pain in the lower right anterior chest, with tenderness on percussion. A chest roentgenogram showed no change<sup>a</sup> since that of admission.

When the fever reached 102°, penicillin and caronamide were discontinued, *with a prompt fall in temperature to normal and the reappearance of positive blood cultures, indicating both penicillin sensitivity of the host and penicillin resistance of the pathogen.* The urticaria, which had been controlled by antihistaminics, flared up again two days after these agents were discontinued, together with a rise in fever. The heart showed little change during the first week, with a rumbling diastolic and loud systolic murmur at the apex and a loud harsh systolic murmur over the aortic area.

On September 14, penicillin and caronamide were again given, and their use resulted in an immediate and alarming temperature rise to 104.8°. The prompt cessation of this therapy was again followed by normal temperatures for a day. There were noted some dullness, decreased breath sounds and decreased fremitus at the right base, and a survey film of the chest showed the persistent ill-defined pulmonary changes which still appeared most likely to be a pneumonitis, with some fluid at the right base. A small amount of fluid was aspirated, showing a predominance of polymorphonuclear leukocytes, but no organisms could be demonstrated nor a growth recovered on culture. On September 17 the temperature again began to rise, and on September 20 streptomycin<sup>4</sup> was begun as 300 mg. every three hours for a total daily dosage of 2.4 grams. The low-grade fever was not altered, and on September 24 sulfamerazine was begun in a total daily dosage of 4 grams. The combination proved equally ineffective. The use of aureomycin<sup>3\*</sup> was suggested, and on October 1 it was begun as 4 grams daily for four days in four divided doses, and then as 2 grams daily as a maintenance dose. Blood cultures just prior to this therapy and again after five days showed no growth. The patient became afebrile and showed no evidence of toxicity. The chest findings cleared both clinically and roentgenologically.

He was allowed to go home on October 9, for financial reasons, after several days of instructing his wife in the use of the thermometer, and he continued taking aureomycin as an out-patient. On October 15 he noted redness of his fingers, hands and toes and some increase in dyspnea. Thinking these developments might be due to aureomycin, he stopped the drug on his own initiative, although practically afebrile up to that time. His temperature and pulse then gradually began to climb, with a sharp rise in fever to 103° on October 21. He

was readmitted that day, showing the ravages of both toxicity and cardiac decompensation, necessitating oxygen therapy in addition to the usual supportive measures, including a diet containing 200 mg. of sodium, and digitalization. A blood culture obtained at this time was positive for hemolytic staphylococcus albus. Urinalysis showed only 1 erythrocyte per high-powered field and no albumin. The leukocyte count was 20,000 with 85 per cent polymorphonuclears. The hemoglobin was 75 per cent, and the erythrocyte count, 3.6 million.

Stab cultures of the organism were sent to the Lederle Laboratories for determination of sensitivity to aureomycin. The report from Dr. Hardy was interpreted as of high degree, but of course not directly comparable to a sensitivity test for penicillin.

Three sets of electrocardiograms, including all chest leads as well as unipolar leads, were obtained during the course of his illness. The second and third groups demonstrated a small infarction in the anterior wall of the left ventricle, as well as an increased P-R interval.

An x-ray of his chest on October 22 showed further progression in the amount of congestion in both lung fields, as well as fluid at the left base. On October 23, following a temperature elevation to 103.8°, aureomycin was begun in divided doses of 1.5 grams per day, and there again resulted a temperature fall, followed in two days by redness of his hands and itching of his finger tips, for which antihistaminics were given and the treatment continued. There were a few episodes of violent coughing accompanied by blood-flecked sputum, and a roentgenogram revealed a small pneumothorax involving mainly the left lower lobe. On October 26, he complained of nausea for an hour or more following each dose of aureomycin. Beginning October 28 was the first of several attacks of acute anoxia, characterized by inability to breathe, ashen color and excitement. The aureomycin was reduced to 1 gram daily in two divided doses. On October 30, the aureomycin dosage was increased to 3 grams daily, again followed by nausea. Once again, following adequate dosage, the patient became afebrile and remained so until November 6. After a rise to 100.4° on November 7, the temperature fell, until four days later it completely escaped and rose to 101°, which level was maintained with occasional spikes to 102° and 103° till his demise.

On November 9, a thoracentesis performed in the ninth right intercostal space yielded 1,000 c.c. of sterile straw-colored fluid. A pericardial tap on November 11, revealed no increased amount of pericardial fluid. The leukocytosis increased to 34,000 on November 12, with 89 per cent polymorphonuclear forms and 6 stab cells. On November 13 began episodes of mental aberration, characterized by memory lapses and confusion. Blood transfusions were given on November 12 and 14. The patient died November 15 in respiratory arrest.

On postmortem examination, one liter of straw-colored fluid was found in the right pleural cavity. Massive adhesions throughout the left thoracic space fused the parietal and visceral pleura. Both lungs were involved by multiple small pulmonary infarctions, atelectasis, focal areas of emphysema and very pronounced pulmonary edema and congestion. An old area of infarction measur-

<sup>a</sup>Supplied for experimental use by the Lederle Laboratories through the courtesy and interest of Dr. S. M. Hardy.



ing 2 by 2 cm. was present on the anterior surface of the right lower lobe. There was a moderate degree of bronchitis and peribronchitis. The heart measured  $12\frac{1}{2}$  by  $8\frac{1}{2}$  by 13 cm. and weighed 625 grams. There was a very intense epicarditis with active pyogenic cellular infiltration. The mitral valve measured 115 mm., the tricuspid 120 mm., the pulmonic 90, and the aortic only 40 mm. There was myocardial hypertrophy, chiefly of the left ventricle, where the musculature measured 20 mm. in its thickest portion. At the apex of the left ventricle was found a fairly recent septic myocardial infarct, measuring 3 cm. in its greatest diameter, and several small septic infarcts were present elsewhere deeper in the myocardium. *On the surface of the aortic valve was a firm coalesced verrucous vegetation 4 cm. long, which completely fused two valve cusps and encroached upon the edge of the third. At one point in its attachment was a defect which represented an erosion through the cusp, that overlay the ostium of the right coronary artery. The vegetation extended through the intraventricular septum to involve the tricuspid valve, where it was quite friable and measured 1 cm. in its largest diameter.* Serial cross sections showed that the center of the vegetation which thus involved both sides of the heart was so necrotic as to resemble canalization. The endocardium of the mitral and pulmonic valves was smooth and the cusps showed no deformity. A previously suspected mitral stenosis, based on the peculiar change in the heart sounds as the case progressed, probably was due to perforation of the intraventricular septum. There was no definite evidence of rheumatic heart disease, and no Aschoff bodies could be found. The aorta in its ascending portion showed moderate to severe arteriosclerosis. The coronary arteries were sclerosed but not occluded. The spleen was not remarkable except for passive congestion.

The liver weighed 2,500 grams. Seen on microscopic examination it represented fatty degeneration of moderate degree together with marked cholangitis and pericholangitis. On the anterior surface of the right lobe of the liver was a completely fibrosed infarct measuring  $3\frac{1}{2}$  cm. in its greatest diameter. The gall bladder showed evidence of chronic cholecystitis. These findings explained the right upper quadrant pain about which the patient rather constantly complained. Only a few and very small septic infarcts were present in the kidneys. Examination of all other organs, including the brain, revealed only the changes of chronic passive congestion.

### Discussion

In this case it is probable that the patient's illness began as either acute rheumatic pancarditis, or a congenital valvular defect followed by the implantation of one of the more unusual organisms on the aortic valve, causing rapid ulceration through the intraventricular septum with a very large coalescing valvular thrombus. The progress of this case is similar to that commonly seen in gonococcic endocarditis,<sup>6</sup> in contrast to

the clinical progress of the usual nonhemolytic streptococcal subacute endocarditis. Although the organism, hemolytic staphylococcus albus, was highly sensitive to aureomycin, the intense ulcerating endocarditis, established before this antibiotic was administered, precluded recovery.

However, the case again illustrates the previously emphasized<sup>1</sup> importance of determining the relative value of an antibiotic to a pathogen at various times during treatment. In this case the high resistance of the organism to one and its extreme sensitivity to another illustrates this point.

This case history emphasizes the necessity for the development of a simple technique by which sensitivity may be determined between a given organism and all antibiotics now available in a given case.

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There is evidence all over Britain of the tremendous appeal of a plan that promises the public comprehensive medical care almost without limitation and at no direct cost. The Government has yet to deliver on this promise, but as long as there's any chance of it doing so, most of the people want to let things take their course.—RICHARDSON, *Medical Economics*.

Only one-seventh of the annual cost of the British Health Service is paid by contributions from workers and employers; the balance is paid out of taxes, which in income taxes alone now amount to 45 cents out of every dollar a poor man earns and 97.5 cents out of every dollar a rich man acquires. In addition, there are indirect taxes, sales taxes, profit taxes, inheritance taxes and so on and so forth that take from 24 to 100 per cent on the balance. Any Briton can avail himself of the Health Service as indeed can any American or Canadian, Turk or South Sea Islander who happens to be in Britain and feels himself in need of an appendectomy or a new set of dentures. British doctors may take any private patients they wish, provided any can be found who have anything left to pay medical fees after they have paid their taxes. British socialism leaves everyone perfectly free to get any private medical attention he wants, it simply does not leave him any money with which to buy any private medical attention or much of anything else.—*Richmond, Virginia, News Leader*, Sept. 20, 1949.

# Common Sense and Heart Disease

By Franklin D. Johnston, M.D.  
Ann Arbor, Michigan

WITHIN THE last few years we have seen a great increase in interest and concern on the part of the public in regard to heart disease. The reasons for this are not hard to find. Chief among these are the appreciation that heart disease is the leading cause of death in this country, the realization that some types of cardiac difficulty, particularly coronary artery disease, may cause sudden death or long periods of disability, often at a relatively early age, and the large amount of publicity in newspapers, magazines and the radio concerning these and related matters. Much of this information has been on the sensational side or even been plainly misleading, but it cannot be denied that the American people have become heart conscious.

This situation is reflected in changes that have taken place in the American Heart Association and the rapid establishment of local branches of this parent organization in many states and smaller communities in recent years. Until recently the American Heart Association was a purely scientific organization made up solely of physicians, but this is no longer true, and lay members are also being included in many of the local societies recently formed. It is certainly true that the inclusion of prominent executives and business methods will bring in large sums of money, much of which should be spent to support research and teaching activities, particularly postgraduate instruction, in the field of heart disease.

If one looks realistically at the situation, it is clear that the incidence of heart disease can be cut down or the condition of the cardiac patient can be benefited in only two ways. Progress in the first direction must depend on successful completion of basic research work which will tell us, among other things, much more than we now know regarding the causes for hypertension and rheumatic fever. Research activities may also lead to improved methods of treatment for the patient with heart disease, but if we are to accomplish a great deal in looking after the indi-

vidual who has (or who thinks he has) heart disease, we must have physicians with good common sense and adequate basic training in the diagnosis and management of cardiac patients. These immediately foregoing matters will be discussed in more detail presently, but a few more comments must be made concerning research.

Research of any kind, and medical research is no exception, costs money. The collection and allocation of funds for this purpose is, however, no guarantee that investigation of any value will be done. Ability to carry out really fundamental and important research work is, unfortunately, rare. Imagination, persistence and the spark of genius are some of the qualities that characterize the great investigator. It is to be hoped that a conscientious effort will be made to find individuals of this type and to give them the money and the opportunity they need to carry on. Whether these exceptional men or women are on the staff of a medical school or working elsewhere, they should be relieved as completely as possible of routine teaching, clinical or administrative duties. Otherwise, their efforts will be unnecessarily handicapped.

What can be done to help the average physician to do a better job in looking after patients with heart symptoms or disease? The answer to this question may be partly better undergraduate and more and better postgraduate training. The former is difficult to achieve because the undergraduate curriculum is already overcrowded, and it is doubtful whether even intensive teaching efforts at this time would help the individuals involved to do a much better job of caring for heart patients later on. Postgraduate medical education is a much more promising way to attack the problem, but unfortunately some physicians who need additional training and new ideas refuse to take advantage of such opportunities.

A great deal can be accomplished to improve the treatment of heart disease, real or fancied, in the immediate future, if the physician can develop a more optimistic attitude toward cardiac problems and if he can be made aware of some common mistakes in diagnosis and treatment. Doctors are more heart conscious today than ever before and are inclined to blame the heart for sudden death or other things when there is no clear evidence that this organ is abnormal. This is one reason why heart disease is, according to mortality statistics, the leading cause of death to-

Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan.



day. It is not implied that the above-mentioned factor is as important as other things, such as increase in average life span (due to improved treatment of other diseases, particularly pneumonia and tuberculosis) or improved methods of diagnosis, in causing heart disease to occupy the unenviable position it now holds. It is inevitable that many individuals in middle and old age will die of cardiac difficulties, since the heart is one of the vital organs necessarily affected by the aging process. Death in many patients, who we now know die of coronary occlusive disease, would have been ascribed to "acute indigestion," or something equally vague twenty and more years ago. Heart disease cannot be dismissed as a trivial matter, but if physicians keep the points enumerated above in mind, an attitude of optimism can be maintained.

A good history and a careful physical examination are and always will be the most important things needed to make an accurate cardiac diagnosis, and many more mistakes can be traced to neglect of these basic procedures than to failure to take an electrocardiogram. As a matter of fact, some of the most pathetic errors are made because the electrocardiogram is relied upon to the exclusion of the history and physical findings. Precordial pain is a very common complaint, and many individuals with discomfort in this region suspect heart trouble and consult a physician. The wise and well-informed doctor will, at this point, take the time required to obtain a detailed description of the character of the pain, its primary location and possible radiation, the duration of individual attacks, and factors that may bring it on or may relieve it. From an adequate description of the pain, it is usually possible to decide with a high degree of certainty whether the discomfort is angina pectoris or is not of cardiac origin. The history alone makes it possible to establish a diagnosis of angina (or to rule it out) in most instances, and it is particularly important in this condition, since physical examination and all laboratory procedures, including electrocardiograms, may be entirely normal.

The essential nature of the history in the circumstances mentioned above is obvious, but it is scarcely less important in the work-up of many other patients. Consider for a moment a young woman who comes to a physician complaining of shortness of breath. This patient has been worried about her heart because someone in her

bridge club told her that this symptom indicates heart disease. The first job of the physician should be to find out just what the young woman means when she talks about shortness of breath. He often finds by careful questioning that she has no true dyspnea but "seems to have trouble getting air in and out and notices frequent sighing respirations." Further inquiry reveals that dizziness and numbness of the hands and feet are often associated with her breathing difficulties. These facts point clearly to a functional rather than a cardiac cause for the shortness of breath, and when the absence of heart disease is confirmed by physical examination, the physician is in a position to reassure the patient and point out to her the nature of the symptoms.

An adequate physical examination is no less important than the history. The examination of the patient suspected of heart disease should not be limited to the heart alone, since many other findings, such as orthopnea, engorgement of the neck veins, hepatomegaly, edema, petechiae, et cetera, may be important. If one is to examine the heart properly, a logical and systematic approach is important. If, when the physician has finished the examination of the heart he can answer the following questions, the examination has been a satisfactory one.

1. *Is the heart enlarged or not?* This can usually be determined by careful percussion.
2. *Is there any abnormality of rate or rhythm?* This can also usually be decided by careful auscultation.
3. *Are the heart sounds unusual or abnormal in any respect?* Paying careful attention to the heart sounds and looking for deviations from the normal will pay dividends here.
4. *Are any extra sounds present, and, if so, are they in systole or in diastole?* Three sounds in each heart cycle instead of the usual two may produce a gallop rhythm, if the heart rate is rapid. A gallop rhythm is usually of no significance if the extra sound is in systole or is a physiological third heart sound.
5. *Are any significant murmurs present?* Diastolic murmurs almost always mean organic heart disease, while systolic murmurs may or may not have such significance. Many individuals with normal hearts have systolic murmurs either at the apex or base.
6. *Are there other less common auscultatory*

*findings, such as pericardial friction rubs present?* A pleuro-pericardial friction rub may be heard over the heart and must be differentiated from a true pericardial rub.

Examination of the heart, particularly auscultation, is not always a simple matter, and experience is necessary if the physician is to become skilled in this field. It should be added that one can find great satisfaction by becoming expert in the auscultation of the heart. Infinite variety exists here, and one never ceases to learn.

Many individuals with normal hearts have systolic murmurs, and the physician must be on guard not to suggest or directly state that this finding means heart disease. A great many patients have had their activities unnecessarily limited or have been started on the road to a serious cardiac fixation by over-enthusiasm in the interpretation of systolic murmurs. The physician can usually decide whether a systolic murmur is or is not of significance if he makes proper use of the history, the balance of the physical examination, and has some understanding of the factors leading to the production of murmurs of all kinds. Should the doctor be uncertain regarding the significance of a murmur, it is far wiser to ignore it for the moment and re-examine the patient again subsequently, or to refer the individual to a competent cardiologist, rather than to assume immediately that the murmur means heart disease.

The history and physical examination require no expensive equipment but only the willingness to take the time necessary to carry them out. Physicians assuming responsibility for the diagnosis and management of cardiac patients cannot overemphasize these basic disciplines.

Laboratory procedures of various kinds, including electrocardiograms, have a place in the examination of cardiac patients. These things, generally speaking, should be used to round out or confirm impressions gained from the physical examination and the history. Occasionally electrocardiograms make it possible to establish a diagnosis which might otherwise be difficult or impossible, but this is rarely true except in certain of the arrhythmias and when myocardial infarction is present. If these records are to be used to best advantage, they should be interpreted with full knowledge of the patient's history and physical findings. This is particularly true since many electrocardiographic abnormalities are nonspecific in character; that is, they point to no definite etiologic or pathologic

condition. When considered in connection with the important clinical findings, they may be helpful, but if taken alone may lead to nothing but confusion. Many patients have been told they have heart disease and have even been put to bed for long periods of time purely on the basis of minor abnormalities in the electrocardiogram, when there is nothing in the history and there are no physical findings to justify such a course. One must remember that electrocardiograms are records of electrical events associated with the heart beat and may be modified by peculiarities in the position of the heart, alterations in conductivity in the tissues, and other things of this sort that may be quite independent of serious structural heart disease. The wise physician will understand the limitations of these records and will always evaluate their importance in the light of the information gleaned from the history and physical findings.

Treatment of patients with heart disease cannot be considered in any detail here. We must remember that many patients are being given digitalis or other drugs for no good reason and not infrequently for heart conditions that are nonexistent, except in the mind of the physician. A sane and common-sense view relative to the use of therapeutic measures whether they be restriction of activity or drugs, is important. Generally speaking, it is unwise to limit the physical activities of any patient more than is absolutely necessary, and it is certainly foolish to give medicines unless there are good pharmacologic reasons to indicate their use.

Finally, there is reason for optimism relative to most cardiac problems, and physicians can do a great deal to decrease cardiac disability and improve the morale of their patients and the public at large.

### MSMS

Kaposi's sarcoma is twenty times more common in males than females. Radiation is the treatment of choice.

\* \* \*

Glandular therapy is indicated only when a cancer of the breast is classified as inoperable.

\* \* \*

Whenever laparotomy is performed, the physician should take that opportunity to examine the patient's ovaries.

\* \* \*

The most important sign of carcinoma of the colon is a filling defect which may vary in size and shape but is usually localized.



# Employment Problems Faced by the Cardiac Patient

By John G. Bielawski, M.D.  
Detroit, Michigan

ONE OF the principal goals of the Michigan Heart Association is to increase employment opportunities for individuals with heart disease. The importance of heart disease in relation to employment cannot be over-emphasized. It has been established that at least 8,000,000 persons in the United States have some form of heart disease.<sup>4</sup> Due to the increasing average life span, this number is steadily rising with the addition of those in whom the aging process is affecting the cardiovascular system. It is a problem, therefore, which affects not only the individual cardiac patient in his attempt to be a useful, productive, and self-supporting member of the community, but also affects our entire economy and social structure, for if all these individuals were considered unemployable, the effects would be tremendous. For these reasons the Michigan Heart Association has instituted a state-wide community service in the form of a consultation service to business and industry in the many problems incident to the employment of cardiacs. This service is not concerned with the clinical examination and diagnosis of individual cases but with their employability and placement in suitable jobs.

The key to proper utilization of the cardiac patient, as with other handicapped persons, is proper job placement. Physical capacity of the patient must be correlated with the demands of the job. Although this formula sounds simple, it is often difficult of execution. Many factors serve to complicate the situation, and particularly in the mass production industry, so prevalent in Michigan, is this true. Understanding of some of the complicating factors will do much to aid the practicing physician in helping his patients solve these employment problems. This communication is presented not as a detailed guide to job placement of the cardiac patient but as a broad picture of the employment problems faced by him. It is based on the experiences of the Michigan Heart Association's Consultation Service to Business and Industry. This service is provided not only to the industrial physicians of firms large enough to

maintain a medical service but also to smaller firms to whose problems, because of their lack of a medical department, special attention is directed.\* The consultations are individualized, advice being based on a study of the problems as they exist in each particular situation. This is a practical, concrete service, by means of which it is hoped that employment opportunities may be increased for persons with a cardiac disorder to the mutual advantage of the disabled employee and his employer. The response and interest shown in this program, not only by industrial physicians but by executives concerned with personnel problems, has been gratifying. We have discovered that industry is aware of this problem and is eager for help in its solution.

Why should industry be interested in heart disease? Simply because the average age of its employes is rising, just as is that of the general population, and with it comes the rise in heart disease previously noted. Progressive management policy is to keep these older employes in spite of their defects. This is not only due to pressure from labor unions but also because industry recognizes its moral obligations to its older employes and because these older workers are the "spark plug" of the productive labor force due to their skill, knowledge, and loyalty. Industry, therefore, can and does employ cardiac patients even though there are certain risks entailed. The most important of these has been the compensation liability incurred. Naturally an employer does not look with favor upon any factor which may raise his costs. This has, however, been less of a problem than might be anticipated. Compensation litigation involving the cardiac person has been sparse in Michigan. Extension of the second injury clause of the compensation law to cardiac patients and other non-visible disabilities might also help in decreasing the reluctance of employers to accept persons with cardiac disease. Another risk frequently cited is the possible danger to other employes or to property in the event of a sudden heart attack. This danger is not present if the patient is properly placed in a suitable job. Absenteeism and labor turnover are among other objections cited by employers to the employment of the cardiac. The experience gained during the war has proved to industry that the handicapped, properly placed, have a good work record, show less absenteeism,

Dr. Bielawski is Executive Director, Section on Industrial Cardiology, Michigan Heart Association.

\*This service is now available to employers and industrial physicians. Address inquiries to: Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan. Temple 1-6400.

less labor turnover and better production with less work spoilage than the unimpaired. The successfully placed, handicapped worker thus ceases to be handicapped in productivity and in earnings.

The practitioner may ask why, if industry is so interested in its employees, do some of his patients have difficulty in returning to work after a period of illness? Why do some of them tell their doctor that they are expected to go back to their previous job even if the doctor has advised it is too strenuous for them? To answer these questions, let us follow the patient back to the factory gate and see what influences are at work.

First of all, most industries have certain rules concerning time lost from work due to illness. Many request a note from the attending physician stating the patient is ready to return to his job. In plants having a doctor this note usually is meant for the industrial physician, in distinction from the insurance form the patient brings in for his doctor to fill out, which form in most places is kept in the insurance office and does not go to the industrial physician. The patient will usually be able to tell his doctor if there is a physician at the plant. In the note it might be wise to incorporate a statement of the specific limitations on work advisable and, with the consent of the patient, the diagnosis. After all, if the insurance office already has a diagnosis, why not give the industrial physician the diagnosis? In most instances this is treated as confidential medical data. Addressing this note to the medical director of the company rather than, as so often is the case, "to whom it may concern," will insure its arrival at the intended destination. Armed with this knowledge, the industrial physician can then proceed to arrange for suitable work for the patient. It is a pleasure for the plant doctor to co-operate in this way with the attending physician in arranging for proper job placement for the patient. On the other hand, it is an unsavory task to try to ferret out what might have been the illness when the note merely states, "John Jones has been under my professional care and is now ready to return to work." John Jones, furthermore, fearing loss of his job, a cut in pay, or due to misunderstanding, may lead the industrial physician astray, to his own detriment.

A case in point was recently seen in an industrial clinic; the patient came in with just such a letter. He had been on sick leave from work for three months, which he said was due to

"bronchitis" and proposed to return to his previous work of heavy buffing, which is very strenuous. Referral to his record showed that three months before he had been brought into the plant hospital pale, sweating, and complaining of severe substernal pain. His private physician had been called and had arranged for hospitalization and care. A telephone call to the attending physician was made, disclosing the patient had suffered a severe myocardial infarction and now was ready for only the lightest kind of work and had been so advised. Further questioning of the patient disclosed that buffing was the only skill he possessed, and, in spite of his doctor's recommendations, he felt he had to go back to it or lose his job. Arrangements were made to translate the attending physician's recommendation of light work into a seated inspection operation involving handling of small parts, without any production level to maintain. True, it took an additional week before this new job was found, and it did not pay as well as the old one, so that the patient was still quite unhappy. Yet what would his feelings have been if he had lost a leg in an automobile accident? That, too, would have disabled him for the old job; but having a visible handicap, he would have welcomed the new one with its lower pay.

One thing the attending physician can do in this respect is to impress the patient with the nature of the limitations of his nonvisible cardiac disability and their economic implications. Another is to get in touch with the industrial physician in advance of the expected date of return to work so that preliminary steps in planning for proper job placement can be taken and suitable work is ready when the patient returns to his place of employment. This can most readily and efficiently be done by telephone. This type of program not only can be accomplished, but it is being accomplished at the Eastman Kodak Company in Rochester, New York, except that there the plant doctors have taken the initiative in the program. It is possible there because of a very close liaison between the company and the practicing physicians of the community developed by the company's part-time employment of many of these physicians early in their practice. Whether it is the industrial doctor who calls the attending physician or vice versa is immaterial as long as the contact is made for the benefit of the patient. It would seem feasible in most instances for the attending physician to make the initial call to notify



the industrial doctor of the problem and get the planning for suitable placement started. After all, it is the attending physician who knows just about when his patient will be ready to return to work and what his physical capacity will be.

Where the name of the industrial doctor is not known, inquiry for the medical director will usually enable the plant switchboard to place the call properly. Instances where this approach is not feasible will, of course, arise. It might then be a good plan for the attending physician to instruct his patient or indicate on his note to the industrial doctor that a telephone call relative to the status of the patient would be welcomed. Of course, not all plants have a full-time industrial physician. Many have an arrangement whereby a doctor visits the plant on only certain days and hours. In such instances telephone communication may be difficult due to the difference in the schedules of the attending physician and the industrial doctor, but a little extra effort will usually result in success and be repaid by the greater emphasis and fuller understanding achieved. Other plants may have only a nurse available, or there may be no provision for medical care within the plant. In such a case it would be wise to reach the general manager and explain to him not the diagnosis but the nature of the patient's restrictions and also capacity in order to obtain his understanding and co-operation in the proper placement of the patient. Naturally, it is wise to emphasize what the patient can do, rather than what he cannot do, in talking to employers. In these smaller plants which do not have any industrial physician, the telephone call of the attending physician may be the deciding factor not only in successful selective job placement but even in actual return to work of the patient, for the manager, like most lay people, may believe that the diagnosis of cardiac disease entails total permanent disability and precludes further employment. Changing these concepts is the job of the entire medical profession, and it is the practicing physician who is the key figure in the campaign. Attempts to enlarge employment possibilities for the cardiac patient by programs such as that of the Michigan Heart Association are only supplementary. It will take the continuous interest and support of all physicians in Michigan to make this program a success.

Of course, not every industrial establishment is co-operative, nor does every case receive ideal job placement. Fortunately these situations are not

as common as in the past, for modern industrial management puts great emphasis on good labor relations, and the problem of the handicapped employe is an important part of this program. Even with a management sincerely interested in the return to work of the patient, proper placement in heavy industry may be a difficult problem. The individual with some special ability may be placed fairly easily, but all too often the cardiac patient is a person who up to his illness had performed only heavy unskilled labor and does not have the dexterity to perform a light task, for usually unskilled work is either slow and heavy or light but fast. Furthermore, the mental strain of meeting production standards may be as harmful as heavy physical labor, as for instance in the patient with angina pectoris. That these cardiac patients, however, can and do return to work has been amply demonstrated. Kresky and Goldwater<sup>1</sup> some years ago found that 65 per cent of the 2,081 patients attending various cardiac clinics in New York City were doing some type of work. Master and Dack<sup>2</sup> found that of 415 patients who survived the acute episode of coronary artery occlusion, 53 per cent returned to work. The literature is replete with instances of long survival after myocardial infarction. It is, therefore, definitely worth while to return most cardiac patients to work, providing proper job placement can be accomplished. When a suitable job is found, other factors may complicate the transfer. Labor's own hard-won and highly prized seniority system sometimes interferes. One plant was recently visited where transfer of a cardiac patient from heavy press work to a light job in another division was refused by the patient because by terms of the union contract he lost his job seniority by the transfer, and thus would be the first laid off when work was slack and the last to be recalled when it picked up. The reverse was true in the press room, but work suitable to his capacity just did not exist there. In some situations transfer is impossible. The railroad engineer who develops cardiovascular disease usually cannot be transferred to other work because of union rules. Some provision in union contracts should be made to render the transfer of the handicapped for the purpose of selective placement less difficult.

These are some of the factors that are encountered when a change in job placement is made necessary by heart disease. In some instances, however, the patient must seek a new field and a new employer. He now encounters new difficul-

ties. He no longer receives special consideration because of seniority of service with that employer but must compete with all others seeking a job. Unless he has some special skill or ability which is in demand and which entails a job within his physical capacities, the patient has a difficult time. The employer hiring unskilled labor usually wants men whom he can switch from one spot to another; therefore, he desires men who are physically qualified for heavy work. In most of the heavy industries of Michigan there are few unskilled light jobs, and these are filled by employees with long terms of seniority. Thus it is important for the patient who develops degenerative heart disease to try to return to work for the employer with whom he has established seniority. It is even more important, however, for children with rheumatic and congenital heart disease to acquire skills and knowledge which will pave their way to successful employment and consequent self-support and self-respect in adult life. This calls for insistence on at least grade school education and later realistic vocational guidance towards this goal. The importance of education to the youthful cardiac patient cannot be stressed too strongly. Responsibility for this is shared by the family of the patient, the attending physician and the school system. The State of Michigan, as part of the Department of Public Instruction, offers the services of its Office of Vocational Rehabilitation to assist in the program. These services are available not only to the young cardiac patients (to whom it is offered commencing at about age sixteen) but also to the adult individual with cardiac disease and to all who because of disability need this help. Service information, medical diagnosis, guidance (including testing, counseling and planning), cost of tuition for training, and placement services are provided without cost to disabled persons. Other services require an investigation of financial resources. A medical report form is sent to the family doctor. This is needed to determine eligibility and as a guide in providing vocational rehabilitation. Reimbursement for the necessary medical examination is made according to the Michigan State Medical Society Fee Schedule for Governmental Agencies. The Office of Vocational Rehabilitation may be contacted by the patient through one of its eight district offices, by writing to the central office in Lansing, or through the local office of the Michigan State Employment Service.

The Michigan Heart Association, in order to

help meet some of these employment problems of the cardiac patient, has instituted a program designed to help develop techniques and experience in the placement of cardiac patients within industry. Further work planned within industry is to accomplish a survey of an industrial population in order to determine the incidence of cardiac disorders in such a group, and by follow-up of cases found, attempt to correlate the effects of various kinds of work upon the course of heart disease and thus assess the suitability of various occupations for cardiac patients. In time it may be possible to develop a service for the unemployed cardiac patient, a service similar to that of the Bellevue Work Classification Unit,<sup>2</sup> combining diagnosis and functional assessment by the physician with vocational guidance by a trained job analyst, designed to reveal the full employment possibilities of the patient and thus lead to satisfactory job placement. Other services under consideration include a vocational therapy program for the cardiac patient confined to his bed or home.

### Summary

The importance of the productive employment of individuals with cardiac disease is discussed. The key to utilization of the cardiac patient is selective job placement based on a correlation of job demands with physical capacity. Ideal job placement requires close co-operation between the attending physician with his knowledge of the patient's capacity and the industrial physician with his knowledge of job demands. Methods of securing close liaison between them are outlined. The problems encountered in returning to the job after cardiac illness are contrasted with those of the cardiac patient seeking to work for a new employer. In order to help meet these problems, the Michigan Heart Association has instituted a consultation service to business and industry. This is a community-wide service in the many problems incident to the employment of cardiac patients and is part of a program being developed to increase employment opportunities for individuals with heart disease. The support and continuous interest of every physician in Michigan is necessary to attain this goal.

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# Periarteritis Nodosa

## A Review and Two Case Reports

By William Henry Gordon, M.D., and  
Leo E. Davison, M.D.  
Detroit, Michigan

IN 1852 Rokitsky<sup>21</sup> presented his original treatise on a new disease of the blood vessels. In this article, three cases were reported and the necropsy findings were discussed. The pathologic process described is similar to that of periarteritis nodosa. Recognition of this vascular disease can therefore be dated back to 1852. In 1863 Virchow,<sup>26</sup> in his *Cellular Pathology*, reported a condition in which the pathologic findings were similar to those described by Rokitsky. He called the condition, "endoarteritis nodosa deformans."

In 1866 Kussmaul and Maier<sup>15</sup> gave a very thorough and classical description of this disease of the blood vessels, including histological studies. Since that time the condition has been called Kussmaul's disease, Kussmaul-Maier disease, endarteritis nodosa deformans, polyarteritis nodosa, and, more commonly, periarteritis nodosa. It has also been described as one of the diffuse collagenous diseases.

Throughout the years this syndrome has received the attention of clinicians and pathologists throughout the world, and to date more than 400 cases have been reported in the literature. Despite the advance in modern medicine and therapeutics, little can be added today to what Kussmaul and Maier described and reported in 1866. Numerous theories and ideas have been advanced as to etiology and treatment but as yet proof and results have not been established.

**Definition.**—Periarteritis nodosa is defined as a multiple macroscopic and microscopic nodular inflammatory disease, which occurs in single and multiple foci, in the outer and middle wall of the smaller arteries of the body. Because arteries are present in all organs and tissues, the disease may occur locally or generalized. By the same token the signs and symptoms will be directly related to the parts affected.

### Incidence

Periarteritis nodosa is considered to be a rare disease. In recent years, however, the number of

cases on record has increased considerably, probably because the condition is now being looked for and recognized by clinician and pathologist alike. It is the author's opinion that additional instances would be found if more autopsies were performed on cases of sudden death now ascribed to cerebral accidents, coronary heart disease and the like. The disease has been reported in the white, yellow and black races, as well as in mammals.<sup>14</sup> It occurs more frequently in the male than in the female. Approximately 40 per cent of the cases reported are between twenty and forty years of age, but it can occur at any stage of life from two and one-half months to seventy years or older. There is no geographic or seasonal variance in its distribution.

### Etiology

The etiology of this condition is still unknown. Syphilis was first suggested as the causative agent,<sup>5,11</sup> but antiluetic treatment was of no value, nor were spirochetes ever found in any of the lesions. Since many cases have occurred in the absence of luetic infection, this idea has been abandoned. It is known to follow infectious processes, and for this reason some men think it is due to a bacterial hyperergy. Others have thought it due to virus infection, while some have tried to explain it as a sensitivity to the streptococcus. It is the author's opinion along with others<sup>12</sup> that allergy is a definite factor in the etiology. The association of allergic phenomena with cases of periarteritis nodosa is much too frequent to be passed off as mere coincidence. Asthma is often present and in some instances has existed for more than a year prior to the discovery of the lesions of periarteritis nodosa. It has been reported<sup>13</sup> that upwards of 15 per cent of all the tabulated cases have a past or family history of allergic phenomena.

In 1931 Metz<sup>18</sup> produced lesions in laboratory animals similar to periarteritis nodosa by sensitizing them to foreign serum and the streptococcus. Others have reproduced similar lesions in the laboratory by sensitizing animals to various bacterial strains and filtrates.<sup>8,17</sup>

In 1937 Clark and Kaplan<sup>6</sup> brought into the picture the anaphylactic nature of the disease, in their report of two cases proven at autopsy, following pneumococcus serum sickness.

In 1942 Rich<sup>19</sup> came out with his interesting observations on the role of serum sickness and

sulfonamide therapy as a causative agent. He came to the conclusion that periarteritis nodosa is a manifestation of anaphylactic hypersensitivity, and that widely different sensitizing antigens can be responsible for the development of the vascular lesions in different patients.

In 1943 Selye and Pentz<sup>23</sup> reported that an overdosage of desoxycorticosterone acetate in rats produced the lesions of periarteritis nodosa and suggested that the condition may be of adrenal origin due to an excessive adaptive response of the adrenal cortex.

Some interesting work has been recently published by Pearl M. Zeek and associates.<sup>27</sup> They were able to reproduce the lesions in rats by placing silk around both kidneys. If only one kidney was wrapped, the lesions did not develop unless the other kidney was removed. Likewise, silk wrapped around any other organ or tissue in the abdomen did not produce the characteristic pathologic lesions. They also made the observation that the lesions that occur as a result of hypersensitivity to various substances such as the sulfonamides or to serums, although strikingly similar to those of periarteritis nodosa, are really different both as to type and distribution.

In 1947 Sullivan<sup>24</sup> showed that by injecting foreign protein, arteritis can be produced in experimental animals. This foreign antigen becomes fixed in the arterial wall and surrounding tissues. There is an infiltration of lymphocytes and monocytes around the vessel. However, if sodium salicylate is given intravenously well in advance of initial contact of horse serum antigen, the development of the arterial lesion is prevented.

It is apparent that the question of etiology remains to be solved. Marked advance has been made in recent years but the causative agent of periarteritis nodosa has yet to be discovered.

### Pathology

The pathology in this disease is important because of the symptomatology. If only one organ is involved, the symptoms will be relative to that organ alone. When many organs or systems are involved, the bizarre symptomatology is unique, and it is in the latter that the correct ante-mortem diagnosis is more apt to be made. Periarteritis nodosa is considered to be inflammatory in nature involving the medium sized and smaller arteries of the body. In different stages and degrees all the coats of the vessels are affected. There is

swelling, necrosis and fibrillation of the media, destruction of the internal elastic membrane and infiltration of the adventitia with polymorphonuclear leukocytes which are often eosinophilic. The outstanding change is the localized necrosis of the media of the involved vessels. The infiltration of the vessel walls with polymorphonuclear neutrophils, lymphocytes and eosinophiles is marked. Exudation followed by necrosis occurs, which results in thrombosis and the development of small aneurysms along the vessels involved. Occasionally these small bead-like aneurysms are palpable along the course of the affected vessel, hence the name periarteritis nodosa. Due to these pathologic changes small vessels become occluded when the intima is finally involved, with secondary changes occurring in the tissues whose blood supply has been cut off. This usually means necrosis, infarction or degeneration, the extent of the involvement determining the symptomatology referable to the organ or organs affected. Following the acute inflammatory stage, healing takes place by the formation of granulation tissue replacing the hyalinized necrotic areas. The endothelium may proliferate with partial or total closure of the lumen of the vessel. Scarred lesions may become calcified, the calcium being deposited haphazardly in the hyalinized tissue.

As noted previously, Zeek and associates<sup>27</sup> differentiate between the lesions of periarteritis nodosa and those produced by hypersensitivity reactions to such things as the sulfonamides and serum sickness. They maintain that a very important criterion in the differential diagnosis of these two types of vascular lesions concerns the structure of the pre-exudative lesions.

In patients dying of periarteritis nodosa there are usually lesions in all stages of development, while in six cases of hypersensitivity studied, all of the lesions appeared to be much more nearly of the same age, and it was difficult to find pre-exudative lesions in patients who died within a few days after the onset of hypersensitivity. They also point out that periarteritis nodosa rarely involves the splenic follicular arterioles or the arteries of the pulmonary circulation (not to be confused with the bronchial arteries) as does the angiitis of hypersensitivity. Also periarteritis characteristically involves the arteries of the muscular type near the bifurcation. This was not found to be true of the condition described as hypersensitivity angiitis. It is evident that even



the pathological picture of this disease is still open to argument.

### Symptoms and Signs

The onset varies from mild to violent but is usually typical of an infectious process. There is initial languor, chills and fever, headaches and insomnia. There may be diffuse muscular and joint pains and even peripheral neuritis. Gastrointestinal symptoms with anorexia produce progressive weakness, emaciation and anemia. Despite periods of apyrexia the patient continues to get worse and worse. In some cases the course may vary from acute to subacute to chronic, and back and forth, and may last for days to years. The liver and spleen may become palpable and the muscles are usually atrophied and tender. The blood pressure is elevated in many cases. Severe internal hemorrhages may occur. Renal involvement is common, the urinary signs resembling those of acute glomerulonephritis. Depending on the distribution and the extent of involvement, the clinical picture may be that of gastrointestinal, hepatic, renal, cardiac, or organic nervous disease, or combinations thereof. Cutaneous hemorrhages, purpura, urticaria are seen, as well as tender, reddened, painful, subcutaneous nodules involving the extremities. Occasionally peripheral thromboses occlude small arteries and digital gangrene results. Partial blindness may occur due to changes in retinal vessels.<sup>21</sup>

It is evident that there is no definite pattern as to symptoms. Except for the onset which is usually typical of an infectious process, the following clinical course depends solely on the extent and distribution of the lesions.

### Laboratory

The diagnosis may be established by biopsy. However, the specimen must be removed from a region in which there is some sign of the disease such as a cutaneous lesion, a painful muscle, et cetera. Thus, at times, because of the variable distribution of the lesions, a biopsy may give negative results even though the disease be present. When the condition is confined to the abdomen, a diagnosis of acute appendicitis, cholecystitis or pancreatitis may be made and operation performed. On such material the diagnosis is sometimes established. There may be a moderate to severe leukocytosis as well as secondary anemia. It is estimated that from 10 to 12 per cent of the

cases show an eosinophilia. One case on record showed 86 per cent eosinophiles on the differential count.<sup>7</sup>

Albuminuria and hematuria are not uncommon and the sedimentation rate is usually elevated. Azotemia is seen, particularly in the later stages of the disease.

### Diagnosis

Almost any symptom or set of symptoms may occur. The clinical findings may vary from time to time, and this variation is responsible for a very confusing picture. Given a condition which creates the impression of an infectious process that does not respond to therapy, progressive decline of the patient, and a bizarre clinical picture, one is justified in including periarteritis nodosa in the differential diagnosis. A past history of allergic phenomena under such conditions should make one all the more suspicious. Final verification of the diagnosis depends on positive histological proof.

Boyd<sup>2</sup> points out the different clinical diagnoses made on subsequently proven cases of periarteritis nodosa. Under general infection were listed sepsis, rheumatic fever, Malta fever, miliary tuberculosis and typhus fever. Under cutaneous diagnoses were scarlet fever, purpura haemorrhages, lupus erythematosus and syphilis. Under the gastrointestinal system were cholecystitis, acute appendicitis, dysentery, peritonitis, pancreatitis, gastric ulcer and abdominal hemorrhage. Cardiac diseases were congestive heart failure, hypertension, coronary sclerosis with angina pectoris. Listed under diseases of the muscles and nerves were trichinosis, polyneuritis, radiculitis, Von Recklinghausen's diseases, polymyositis and sciatica. Pertaining to the central nervous system were meningitis and Wilson's disease. Thus the differential diagnosis depends on the organs involved.

### Prognosis

The prognosis in periarteritis nodosa is poor, and although remissions occur the ultimate outcome is usually fatal. Even though there are cases on record reported as recovered or with unusually long remissions,<sup>3,4,9,10,16,22,25</sup> the difference of opinion among pathologists as to what constitutes the lesion of periarteritis nodosa as contrasted to other types of angiitis may cast the shadow of doubt on some of the reported cures. This in turn raises the question brought out by Banks<sup>1</sup> as to whether or not there may be a common denominator in

scleroderma, dermatomyositis, disseminated lupus erythematosus, Libman-Sacks syndrome, periarteritis nodosa and hypersensitivity angiitis as described by Zeek. Further work and study are needed before these questions can be answered.

### Treatment

As yet there is no specific treatment for periarteritis nodosa. The report of a cure by sulapyridine<sup>9</sup> has not been substantiated in other cases. Strong supportive therapy is in order. It is important to build up the patient's resistance with a high caloric diet, vitamins and an adequate fluid intake. Small repeated blood transfusions may be helpful. Plasma and serum albumin may be used to maintain the serum proteins. Auto-inoculation of the patient's own blood may be tried. Because thrombi formation in the vessels is so common, the anticoagulants may be tried. The antihistamines because of their proven value in allergy should be used empirically. A case in point has been arrested two years, and the only therapy used was benedryl. Such substances have not been available long enough to say whether or not they may be of definite value in the treatment of this condition.

### Case Reports

*Case 1.*—Mrs. G. N., a twenty-two-year-old white woman, was well until March, 1946, when she developed an upper respiratory infection. A chronic cough persisted, and a diagnosis of bronchial asthma was finally made. Treatment consisted of benedryl, sulfonamides and finally tonsillectomy in July, 1946. No improvement was noted as a result of any of this therapy. Benedryl was continued, and in September the asthmatic condition subsided.

The patient became pregnant in October, and one month later the asthmatic episodes recurred. Treatment with penicillin, ephedrine, and theophylline afforded no relief. She was skin tested and subsequently started on desensitization shots plus a diet excluding the foods to which she had shown a sensitivity. The chronic cough persisted. In June, 1947, an eight-month premature child was born. Shortly after the delivery the asthmatic attacks ceased. In July the patient noted weakness and pain of the lower extremities. One month later she was hospitalized for a period of twelve days for a thorough study. A white blood count of 49,000 with 86 per cent eosinophilic leukemia.

She continued as an out-patient following her discharge and received physiotherapy to the lower extremities and vitamins by injection. No improvement was noted. Weakness and numbness of the hands accompanied by pains in the shoulders and arms gradually developed. There was also frequent gastrointestinal distress, and it was questioned as to whether this was related to the

over-all condition or the medication. By October, 1947, a temporary improvement was evidenced and the appetite returned. There was a weight gain to 85 pounds, and an increase in strength and much less pain. During this interval however, recurrent episodes of hives occurred. In mid-February, 1948, coincident with the institution of liver therapy, anorexia again recurred along with frequent attacks of gastrointestinal upset. On March 30, 1948, the patient was first seen by the author. At this time she complained of weakness of the extremities, periodic rashes on the body, anorexia and nausea. Hospitalization was advised.

*Past History.*—During childhood the patient had chronic sore throats. There were the usual childhood diseases, none serious. Tonsillectomy was performed in 1946. There was no family history of allergic diseases.

*Physical Examination.*—The patient was very emaciated and appeared chronically ill. Weight was 83 pounds. Blood pressure was 110/76. The spleen was palpable 1 cm. below the left costal margin. The tendon reflexes were absent in both upper and lower extremities. There was a bilateral foot and hand drop. The extremities showed an ecchymotic rash which in places was slightly raised as if there were small aneurysms of the terminal blood vessels. This rash in other places appeared like an urticaria and was present on the hands, feet, legs, groin, axilla and abdomen. Over the eyebrow and forehead in the area of the large supraorbital arteries there were two small nodules in the blood vessels. There was a generalized shoddy lymphadenopathy.

*Laboratory Studies.*—X-ray of the chest was normal. Skeletal survey showed a moderate degree of demineralization of the bones of the arms and legs, characteristic of disuse atrophy. Blood studies revealed a moderate normocytic, normochromic anemia. The white blood cells were increased to 14,000-15,000 and the differential count showed a marked eosinophilia, averaging 40 per cent and consisting of segmented and non-segmented nuclei but none younger than this. There was a moderate hypoprothrombinemia. Examination of the bone marrow revealed a marked eosinophilic reaction with a shift to the left in those cells, to a degree seen in many eosinophilic states. There was no evidence of leukemia in the bone marrow smear. A biopsy of a lymph node from the posterior cervical chain showed extreme eosinophilia. Biopsy of the skin showed perivascular eosinophilia suggestive of periarteritis nodosa. Urinalyses, Kahn test and blood chemistry studies were within normal limits.

*Subsequent Courses.*—During the hospitalization period from April 4, 1948, to April 17, 1948, it was felt that sufficient evidence was obtained to make the diagnosis of periarteritis nodosa. The patient complained frequently of pain involving the extremities and also of abdominal cramps. It was necessary to use demerol to afford relief. Blood transfusions and general supportive therapy were administered. Following discharge from the hospital the overall course was downhill. Some



days she would be relatively free of pain and would eat well, while at other times opiates were necessary for relief. On May 20, 1948, she developed right lower quadrant abdominal pain, and a diagnosis of acute appendicitis was made and the appendix removed. On June 21, 1948, the patient developed nodules along the course of the radial and ulnar arteries in both arms. On June 29, 1948, the patient developed severe generalized pains and she was again hospitalized. She lapsed into a coma and expired the following day. No post-mortem examination was performed.

*Case 2.*—Mrs. R. L., a twenty-nine-year-old white woman, was well until March 11, 1948, when she developed pain in the right side, followed by generalized pain in the abdomen, accompanied by severe diarrhea. A gastrointestinal x-ray series, four days after the onset, was negative. On the morning of March 22, the abdominal pain became more severe but was relieved by an enema. However, it recurred again at noon and was localized in the right side. There had been no nausea or vomiting.

*Past History.*—For one year the patient had asthma. Skin sensitivity tests were negative. Over this period there had been a 35-pound weight loss.

*Physical Examination.*—The patient was markedly emaciated and appeared both acutely and chronically ill. Blood pressure was 120/70. Abdominal examination revealed generalized tenderness, most marked at McBurney's point. There was spasm of the right rectus muscle. The remainder of the physical examination was negative.

*Laboratory Studies.*—The red blood cell count was 4,980,000 with 80 per cent hemoglobin. The white cell count was 25,000 with 76 per cent neutrophils, 11 per cent lymphocytes, 9 per cent eosinophils and 4 per cent monocytes. Blood chemistry studies were normal.

*Subsequent Course.*—The white blood cell count increased and an exploratory laparotomy was done on March 23. The intestines were studded with small nodules resembling miliary tuberculosis. Pathological specimen showed periarteritis nodosa. The appendix was normal.

The patient died at home shortly after discharge.

### Conclusions

1. A brief review of the disease periarteritis nodosa, with both past and present day opinions on its various aspects, has been presented.
2. Two cases have been reported in detail, each of which was proven by pathological study. Both patients had an asthmatic history.
3. It is the author's opinion that the disease is much more common than has been reported, and that more autopsies in cases of sudden death would bear this out.

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# Peripheral Arterial Disease

## Recent Advances in Surgical Treatment

By Gerald H. Pratt, M.D., F.A.C.S.  
New York, New York

THE REMARKABLE extension in life expectancy in the last 100 years, from forty-two to sixty-seven years, can be attributed directly to medical and surgical control of infectious, degenerative and malignant diseases. Were this rate of longevity to be continued for the next century, our grandchildren could expect to live to be ninety-two years old, and this is not without the realm of possibility. In one field, however, our attack on the problems affecting life has not kept pace. I refer, of course, to the diseases of degeneration and particularly to those affecting the cardiovascular system. Very little study or research has been expended so far in efforts to control this group, and in this respect we have been negligent. A budget for research of \$16,000,000 for poliomyelitis with a death rate of 1,112, or \$13,500 per death, compared to the return of \$39,000 following the campaign of the American Heart Association for cardiovascular research with a death rate of 557,143, or 7 cents per death, is an example of this disproportion. Approximately 60 per cent of all those over fifty will die of some cardiovascular lesion, and when this is contrasted with the 9 per cent that will die of malignancy, and when funds and research work to control the two types of lesions are compared, the necessity of more work and research in the cardiovascular field is at once apparent. Our own recent report,<sup>3</sup> showing that in people who are working at forty years of age, arteriosclerosis is discernible in the peripheral vessels by x-ray in 40 per cent of all the men and 20 per cent of the women, is illuminating. This shows that these degenerating diseases begin much earlier than we thought—ten to fifteen years before the symptoms develop which bring the condition to the patient's attention.

In the patient with diabetes mellitus, the development of arteriosclerotic changes in the peripheral vessels is much more rapid than in the non-diabetic. All diabetic patients over forty will show these sclerotic changes, and the great majority of

them will have changes discernible within the period of three years after the diagnosis of diabetes mellitus. It is not entirely clear why diabetics develop these arteriosclerotic changes so early. It makes one believe that possibly the faulty metabolism of fat products, which occurs so early in the diabetic and is dependent upon improper sugar metabolism, leads to the sclerotic changes rapidly. One may hypothesize that arteriosclerosis is a disease due to the faulty metabolism of lipids due to the failure of proper sugar metabolism, and in the pure arteriosclerotic person this inadequate sugar metabolism is subclinical. The possibilities of prophylactic treatment by the use of high carbohydrate diets and insulin have not yet been exhausted. While we know little of the etiology or the pathogenesis of these degenerating lesions, we are making strides in the management of the complications of these diseases. If we are able to manage their complications, these patients may continue a useful and provident life as long or perhaps longer than the ones without the degenerating diseases, because with their knowledge of their underlying pathologic condition, they take better general care of themselves.

It is my purpose in this paper to discuss the occlusive arterial diseases and the management of the complications at the various stages in which they are seen. The underlying pathologic condition is a medical and not a surgical one, and the surgeon enters the picture usually at the complication stage. Earlier surgical co-operation can forestall some of the complications. I wish to point out particularly the management of these lesions by some of the newer methods which are at hand. That such medical attention will be successful is attested by our reduction in the amputation rate in thromboangiitis obliterans from 55 per cent to 3.8 per cent in ten years.<sup>7</sup>

These occlusive arterial lesions are progressive, and in the light of our present knowledge it is to be expected that the occlusion eventually will become complete. It is our problem, therefore, to protect the vessels still functioning, prevent the complications which follow trauma or infection, and stimulate, if possible, the formation of other vessels. The problem is twofold. We have the occlusion problem as the major vessels close down with the symptoms of peripheral ischemia as shown by claudication, color, trophic and temperature changes, and the secondary problem that

From the Vascular Clinic of St. Vincent's Hospital and the New York University Medical School.  
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with this ischemia the part's defense against infection or trauma decreases. As these sclerotic and atheromatus changes occur in the major vessels, the arterial lumen decreases in size. Contiguous with this decrease is an effort to develop collateral circulation around such blocks, and this is most effective when the obliteration is slow. If successful, the circulation continues even after closure of the major vessels. Where the deposits are plaque-like, the vessel may continue to function normally until such a plaque is loosened by undermining and suddenly swings closed, not unlike a trap door, or produces an embolus. In such instances, the closing off of the circulation is sudden, embolic-like and shocking, and in a high percentage of these patients gangrene soon follows. In such instances, the occlusive process is an acute one and calls for emergency care. The patient is put to bed at once, and the part kept at or slightly below heart level. Measures to stimulate collateral circulation are then undertaken as will be discussed.

### Prophylactic Therapy

There are certain fundamental or prophylactic medical measures without attention to which other therapy will fail. These are:

*The Avoidance of all Vasoconstriction.*—These patients should avoid exposure to cold or heat, and all physical constrictions such as garters, tight casts, et cetera, should be eliminated. When the major vessels become occluded, the part becomes more subject to spasm. This is probably on a reflex sympathetic basis. The plaque, thrombus, or calcium deposit in the vessel sends afferent stimuli to the ganglia; second order neurons stimulate the sympathetic cells, and these reflexly activate efferent stimuli which cause a vasoconstriction in the affected and collateral vessels. In the absence of disease in the vessel this reflex when it follows injury, is a defensive measure to reduce hemorrhage and squeeze out blood which might clot and prevent circulatory re-establishment after the insult is over. In occlusive disease, however, the insult continues and a vicious cycle is established.

In such a situation the introduction of a spastic drug such as adrenalin, ergot and especially nicotine is contraindicated. The use of *nicotine* which has become the common denominator of American social life, can swing the balance as to whether such a patient with an arterial lesion keeps his limb or not. The great importance of discontinu-

ing smoking is not understood sufficiently. That all arterial occlusive diseases and not just thromboangiitis obliterans patients are effected by nicotine must be recognized. We have seen patients refuse to give up smoking despite the fact that they have been told they will lose their limb if they continue. We have seen patients, after the loss of one limb, continue smoking and despite all other types of therapy lose the other limb. Our reported basket case was an unforgettable instance.<sup>7</sup>

In many patients, an acute antipathy or allergy to nicotine is developed. In the patient who has diabetes mellitus, there is a further problem because the smoking of only two cigarettes can raise the blood sugar as much as 25 to 50 per cent, probably on an adrenalin-stimulating basis. One dislikes to become vehement on any subject, but after observing the impossibility of controlling the smoking habit in patients of this type, we wonder whether making nicotine addicts of all of our best stock at a very early age is not a national problem. This must be considered since over half of these patients, if they live to be fifty, will have some disease with which tobacco smoking is incompatible. Such well-meaning organizations as the Red Cross, the YMCA, the Knights of Columbus and others, by their smokers and donation of cigarettes, help in the creation of this tobacco problem. During the recent war those of us on duty near the fronts were surprised and shocked to see patients brought in an extremely poor condition, many times needing plasma or blood, but rarely without a cigarette hanging from their lips.<sup>5</sup> From my experience with a large vascular clinic I cannot overemphasize the importance of this smoking point.

*Skin Breaks and Infections.*—The second point is the avoidance of skin breaks by trauma or infection. In this respect, *hygiene* is important. We tell our patients to take better hygienic care of their feet than they would of their faces. We have them wash their feet two and three times a day with a change to clean stockings. The care of the nails is especially important. Some member of the family is detailed to do this important task, cutting the nails, after a thorough washing, in a good light with a sterile scissors. All pressure points which might start a focus of infection, such as an ingrown toe nail, corns or callouses, are avoided. In this respect, we must become podiatrists, and the prescribing of adequate sized shoes and stockings is

important. The attention to *fungus infection* which is probably common to us all is necessary because, by the skin breaks caused by this fungus infection, a portal of entry for secondary infection may develop. The evidence that the fungus alone causes the arterial occlusion is incomplete. The use of some mild fungicide, such as potassium permanganate in 1:10,000 strength, as a routine soak once or twice a week will control this problem. Any small collection of pus should be evacuated early. If any *local infection* does develop, it is treated energetically with chemotherapy, the right type of drug being selected for the organism if it is cultured. This chemotherapy is given both locally and generally, and in the case of penicillin massive doses may be used. In this respect, the saprophytic organisms may be a factor, and their eradication by some of the higher galac acid preparations now becoming available, when used in combination with the other chemotherapeutic measures, may be a factor in the saving of a limb. *Focal infections* seem to play a part, if not in the actual onset of the condition, at least in continuing the process once it has been initiated. Such focal infections are usually found in the mouth, throat or sinus site. The dental caries is the most frequent offender. The patient with roentgen evidence of defective teeth usually will continue to have severe symptoms of arterial failure until these foci of infection are removed.

*Stimulation of Collateral Circulation.*—The efforts to stimulate collateral circulation should be unceasing. In the acute stage, bed rest definitely is indicated because the use of the legs creates a demand for blood which the part cannot supply. Sympathetic nerve blocks are employed repeatedly. Once the acute stage of arterial failure has passed, walking, always short of fatigue, will help to stimulate collateral circulation. Simple medical measures such as the use of a warm sitz bath or reflex warmth may be of help. Later, swimming, especially in a warm pool, will be of value, as the buoyancy of the water reduces the muscular activity necessary to keep up; we have our patients paddle their legs while resting the body on an inflated mat or raft. In this effort to stimulate collateral circulation, we have abandoned all mechanical measures and gadgets such as the suction pressure boot or the venous occlusion apparatus as being of questionable value and at times trauma-

tizing. In a few instances in such acute closures where it is apparent that the circulation to the part is irreparably lost, the extremity may be refrigerated to reduce the oxygen demand of the part. This method of treatment is used in our clinic only when it is apparent that further efforts to stimulate or develop circulation to the part will fail. In a few instances such therapy has been effective, and in some in which the limb was thought to be lost, restoration of circulation has been achieved. This is effective in some uncontrolled infected diabetics where the ice and a tourniquet perform a bloodless amputation and permit time for preparation for actual amputation. The use of the pancreatic tissue extracts in certain individuals appear to reduce the claudication time. This is not a constant finding.

The *anticoagulant drugs*, *heparin* and *dicoumarol*, have a definite place in the therapy of these conditions. For example, it requires a much lower temperature to develop gangrene in a limb in which anticoagulant therapy is used, and in similar experiments animals can stand more trauma to their limbs in the presence of cold, with recovery in 50 per cent more of the cases when the anticoagulant drugs are used than without them (Blalock).<sup>1</sup> Experimentally, it has been found that the gangrene rate was zero in a group of sixteen rabbits subjected to refrigeration and treated with heparin, while gangrene developed in every control rabbit which was similarly refrigerated but not given anticoagulant therapy. In a similar fashion, in the patient who has ischemia, more occlusion and spasm are necessary to develop gangrene when the blood is supplied with anticoagulant properties. These drugs are being employed prophylactically at the present time and the results are extremely gratifying. The difficult laboratory tests necessary to insure safety when using the drugs and the technicians' long weekends have delayed their wider application. We have hope that either a simpler test for the prothrombin time will be evolved or it may be possible to slow the action of dicoumarol.

In the acute stage of occlusion we give heparin, 50 mg. intravenously and the same amount intramuscularly. The drug is continued in doses of 30 to 70 mg. every three hours thereafter to keep the coagulation time over fifteen minutes until there is dicoumarol effect. Dicoumarol is started with a 300 mg. dose and the daily dose based on



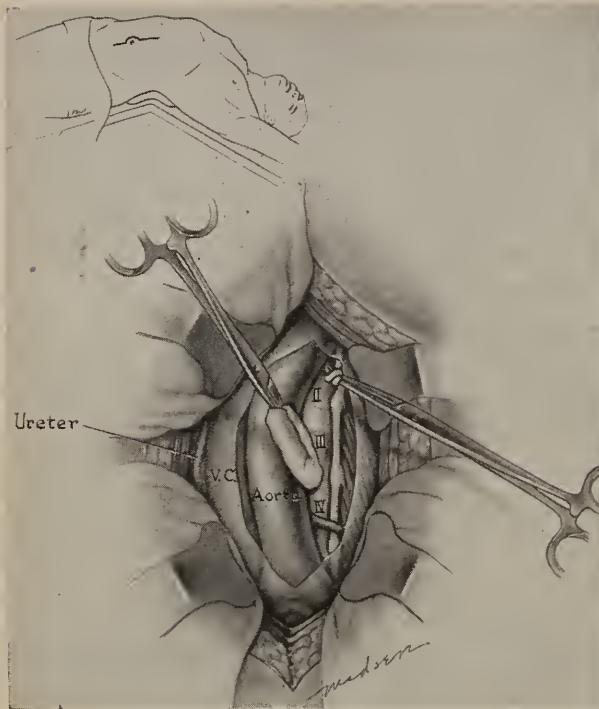


Fig. 1. Transperitoneal Lumbar Sympathectomy. Used where both lower extremities must be denervated. Abdominal contents packed in upper abdomen and retroperitoneum opened in mid-line. Aorta and vena cava displaced medially and chain removed.

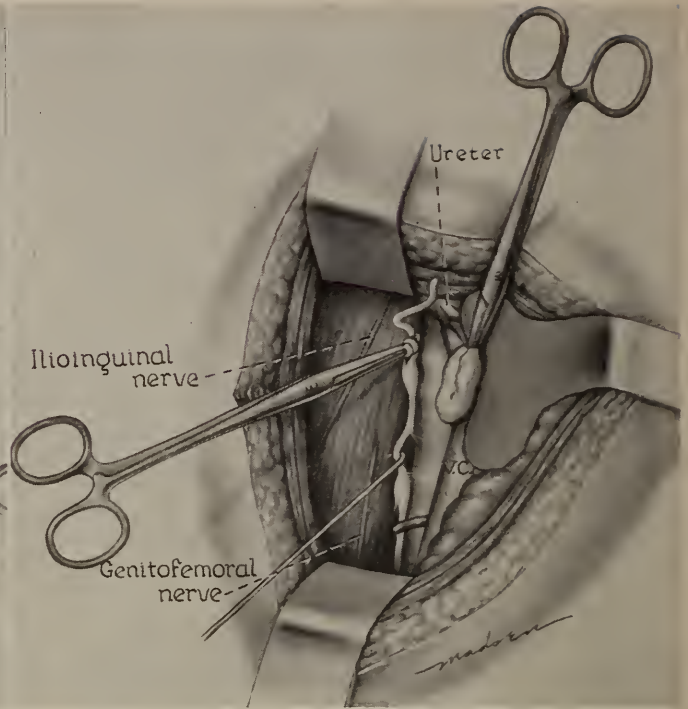


Fig. 2. Retroperitoneal Sympathectomy. Muscle-splitting lateral abdominal incision at level of L 2. Peritoneum pushed to mid-line and ganglia and chain removed by exeresis.

the prothrombin test, at present, as determined by the Link-Shapiro modification of the Quick test.

These drugs should be used in all acute episodes.

### Interruption of the Sympathetic System

This therapy has had a rebirth and has a valuable place in the treatment of these occlusive lesions. We believe the calcium or thrombus deposit on the wall of the vessel sets up and continues the sympathetic synapse with reflex vasoconstriction of that vessel and other collateral vessels. In order for the interruption of the sympathetics to be of value, the operation must be timed properly and the patient selected carefully. Sympathectomy cannot be expected to bring dead tissue back to life, and if it is used at a time when gangrene is already present, the necrosis will continue. (Sympathectomy must be used prior to the onset of necrosis.) The result will be better in the patient who responds both clinically and with skin temperature increases to sympathetic nerve blocks. In others, where there is a poor or no response to the block, sympathectomy will still be effective probably, because the sympathetic block is technically not complete. Sympathectomy must be complete to be effective. The sympathetic system tends to reactivate itself more than any other part

of the body, and it is our policy not only to divide the sympathetics but to excise the chain and ganglion. The good results depend directly on the thoroughness of the procedure.

There have been some recent reports that sympathectomy has precipitated gangrene. We do not believe this statement, and our experiences controvert them. We feel that if gangrene follows sympathectomy, it does so for one of two reasons: either the necrotic process was already irreversible before the sympathectomy was performed, or else the operation of sympathectomy itself traumatically caused an arterial thrombosis or embolism. In performing a sympathectomy, one is operating near the aorta and its major branches, and rough handling or retracting of these large vessels may loosen a plaque of calcium deposit with thrombosis at that site or a distal embolism. We have performed lumbar sympathectomy for the arterial occlusive diseases in over 112 patients, with amputation thereafter necessary only four times. In two of these four we were operating too late, as we now realize. In the other two, we operated to try to have a successful below-knee amputation, and in both of these the calf amputation healed well. Chemical interruption of the sympathetic system in the acute stage is of value,

but thereafter has not been satisfactory in this type of lesion in our hands, despite the good results reported by Collier and his associates. We have tried tetraethylammonium chloride and prisclo but have not used dibenamine. The intravenous ether and intravenous novocaine have a transitory sympathectomy effect. The borrowing-lending effect of sympathetic interruption cannot be as effective when the system is interrupted generally as when it is blocked locally.

### The Complication Stage

As long as these degenerating diseases are present, infections will make amputation in some a problem. We believe in ultraconservatism in the treatment of these occlusive lesions as long as this infection is minimal or controlled. It is our policy when a patient is first seen to give large doses of chemotherapy, use the anticoagulant drugs and perform sympathetic nerve blocks for forty-eight hours. To this we add warm soaks and the local drainage of any fluctuating areas. Each day after the soak loose slough is removed, avoiding pain or bleeding, as these latter symptoms indicate viable and not dead tissue is being removed. If the infection is then reduced or controlled, these procedures are continued.

### Local (Digit) Amputations

Where possible, the part is allowed to self-demarcate and self-amputate, the tendons being left long as drains. Undermining is prevented and the ulcer kept saucerized. Sometimes a dead bone is rongeuired away. Many of these lesions then will heal, and we have in our clinic innumerable patients who have been walking on a foot with parts of toes or parts of the foot gone for many years.<sup>7</sup> The x-ray appearance of these extremities is misleading, as areas of dead bone sometimes may be visualized. Secondary infections may develop which require drainage, and in some we give small courses of chemotherapy from time to time for years. These patients can be kept walking, however, and on their own limbs for many years if they are kept under observation in the clinic.

In this respect these patients should be considered like the tubercular or mental patients. They need protracted or continued care with repeated treatments for any complication. Cardiovascular sanatoria may be the ultimate answer, but until these are provided the attention of someone interested in their problem is necessary if success is

to be expected. If this attention is given, these patients can be kept going on their own limbs for an indefinite time.

### Through Foot Amputation

At the McKettrick Clinic, amputation through the foot is advocated when the blood vessel to one digit has become thrombosed.<sup>4</sup> This operation is based on the theory that with one digit affected, other digital vessels will thrombose, and further necrosis of this foot can be prevented by this amputation. For the healing of such a foot amputation to take place, the operation must be done early, and for this reason we rarely perform this amputation. We believe that many of our patients are walking on parts of their foot for longer periods of time than would be so if we amputated as early as it is necessary to operate for healing to occur when one amputates through the foot.

### Below Knee Amputation

We perform relatively few amputations below the knee in the patient with advanced occlusive disease for the same reason. In order for amputations at this site to heal properly, the operation again must be done very early, and we feel that many of our patients who have their own legs today would have had an amputation had we elected to amputate below the knee. In other words, the questionable cases must have early amputations if amputation below the knee is to be done, instead of having a chance to possibly heal. To repeat, many of these patients do not require amputation at all. In the younger patient or one who has had a sympathectomy, these calf amputations are satisfactory.

### Amputation Through the Thigh

Conservatism is continued until infection is uncontrolled or necrosis advances despite all measures. If the infection is spreading in the face of local and general therapy, and especially when it reaches the ankle, we believe an amputation should be performed, and procrastination thereafter will be reflected in an increased mortality. The defenses against infection are poor once the process passes the ankle. Because of the susceptibility to infection most of the diabetics require amputation through the thigh. The possibility of amputation should be anticipated, and permission and preparation for it started early to avoid delay when the time for action arrives.



### Technique of Amputation

After considerable experience we have adopted a very simplified amputation technique.

*Preoperative Preparation.*—Chemotherapy, especially penicillin, is used in large doses before the operation. In elderly individuals the clostridium welchii and the bacillus prefringens inhabit the colons, and since many of these patients are bed-ridden and partially incontinent, these organisms have been ground into the skin, during this bed stay. The skin of the thigh is prepared with soap and water three times, the last time being in the operating room. This skin preparation causes sebaceous glands in the extremity to secrete to exude these organisms which are then scrubbed away.

*Anesthesia.*—Refrigeration anesthesia has replaced all others as the one of choice. It is entirely effective and is applied as follows:

After premedication, the limb is elevated and placed in ice for a period of three hours prior to the amputation. The ice must completely cover the limb and must be continuously reapplied. Amputation can be done then painlessly except that the sciatic nerve must be injected proximally with novocaine, several minutes before its division. The amputation should be carried out by teamwork without noise or delay. To many patients an amputation is shocking and is like an execution, and the least bunglesome work is the kindest. The incision is made for the thigh amputation at the mid-patella area. The muscles and tendons are divided two inches proximal to the skin incision where they are mostly tendinous and the femur one inch proximal to this point of division. The vessels are opened, any clots in the vein withdrawn or aspirated until a free flow is obtained, and ligated with a transfixion suture. Embolism can be prevented by this measure. No periosteal or tendon flaps are made.

*Care of the Nerve.*—The nerve is divided last. It is tied on tension with a steel wire suture distal to the novocaine area and divided with a sharp knife. It is then permitted to retract. This method has been followed by fewer neuromata and phantom pains than when the nerve was injected with alcohol or plactically treated. Phantom limb is a normal condition. Phantom pain is abnormal. In some it is of psychic origin or it may follow

neuromata. At times it is causalgic in origin. We have had no persistent phantom pain with this technique.

The wound is closed with interrupted steel wire sutures placed through the skin and superficial fascia only. The "dog ears" at either end of the incision are left open as drains. The simple closure is the important part of the operation. If flaps are made, pockets for pus are developed. This simple closure creates no dead space and permits drainage. Stockinette extension with approximately 3-pound weights is applied at once and continued for two to three weeks. The extension prevents retraction, and closes tissue spaces. Since the muscles are not raised from the bone above its division point there is adequate covering for the bone. The dressing is not disturbed for two weeks unless there is a general reaction.<sup>7</sup>

### Rehabilitation

One of the real advances during the recent war was the program of rehabilitation for amputees. We have carried this over into the vascular field, and it is surprising to see elderly patients, whom one would expect to be utterly helpless, walking on their crutches within two days after a major amputation. The removal of these patients from the self-pity and helpless state to a position where they are able to take care of their own toilet and bath requirements is revolutionary in its effect. Where time permits, we begin the rehabilitation program before the amputation by discussing it with the patient, showing motion pictures of other amputees who have walked, preparing the patient's family and friends for the program and likening it to the replacement of lost teeth with an artificial plate. We find it is a fear of being helpless that has caused the mental change in amputees, and where this can be removed by making them self-reliant at once, a great part in the rehabilitation program has been accomplished. We try to have these patients do some type of work. Exercising in groups despite their economic level is of interest and stimulating to them, as they learn by the mistakes and troubles of others. I saw this evidence in one group of twelve amputees in young Marines from Saipan. These men were psychically shocked after their major amputations, but by keeping them in a group, exercising them and getting them joking about their own progress, it was possible in two weeks' time to change their entire outlook on life. When this

group was photographed just before being evacuated to the United States, they insisted that their stumps be shown in the picture. Many already had constructed makeshift limbs.

In this atomic age, with the development of chemotherapy and anticoagulant drugs rapidly removing syphilis, malaria and pneumonia from the unconquered field, I am sorry I cannot offer a specific therapy to cure all arterial occlusive diseases. From my study of them, I think those physicians who are waiting for some miracle drug for these lesions are going to be disappointed, at least for a long time. I do believe a clear understanding of the process as it develops, and the use of all therapeutic measures when applicable, will reduce certainly the incidence of gangrene and mortality in these patients. It is hard to picture one drug which could handle the process of degenerating cells with peripheral ischemia and at the same time control infection and develop new vessels. Until such a miracle develops, a stable understanding of the principles involved in these degenerating processes and their complications will save lives and limbs.

### Summary

1. Arterial occlusive diseases present one of the great problems of today, and while we know little of the pathogenesis, we can do a great deal to help these patients therapeutically.

2. Certain fundamental measures are necessary in this therapy. These are the removal of all vasoconstriction, the avoidance of skin breaks and infections, and the stimulation of collateral circulation. The use of the anticoagulant drugs and sympathetic interruption will decrease the number of these patients who will develop gangrene.

3. While infection is kept minimal, ultraconservatism is continued. When infection enters the picture, it is treated by early drainage, adequate chemotherapy, stimulation of the collateral vessels, and conservatism as far as amputation is concerned while the infection can be controlled. When infection can no longer be controlled, amputation is necessary. When amputation is performed, a simplified technique stressing adequate general and local preparation, refrigeration anesthesia, simple closure, extension and rehabilitation will be successful in a high percentage of patients. Rehabilitation is a real part of the patient's care and should be the responsibility of the operating surgeon.

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### PERIARTERITIS NODOSA

(Continued from Page 1476)

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# Sickle-cell Anemia Complicated by Pregnancy

By Mark Dale, M.D.  
Detroit, Michigan

THAT IT IS difficult for women with sickle-cell anemia to carry a pregnancy through to full term is borne out by the fact that to date only twenty-four cases have been reported. The case reported herein will be the twenty-fifth case to be published. It becomes of particular interest when it is noted that about 8 per cent of Negroes in the United States have the sickle-cell trait; that is, they have erythrocytes which are capable of becoming sickle-shaped in the proper media or under the proper conditions. About 0.2 per cent of Negroes are afflicted with the entity called sickle-cell anemia. Sickle-cell anemia is manifested by episodes of pain in various parts of the body, by attacks of jaundice, febrile episodes, liver enlargement, chronic ulcerations of the lower extremities and a very persistent and severe anemia with sickle-cells and nucleated erythrocytes in the peripheral blood as well as leukocytes, proliferation of reticulocytes, and a hypoplastic bone marrow. The case now reported is not only of interest because it is one of a Negro woman who became pregnant and who was delivered of a normal living child, but because this patient had no complications in labor. Most patients who become pregnant and who have sickle-cell anemia suffer from one of the complications of pregnancy, such as convulsions, severe and frequent headaches, hypertension and generalized edema along with other manifestations of the eclamptic syndrome. It is felt that these symptoms in the sickle-cell anemia patient are due to small thrombi in the cerebral vessels and in the vessels of other vital organs such as the pelvic viscera, the liver, spleen and kidneys.

## Report of Case

*History.*—The patient, M. C., a twenty-one-year-old Negro woman, was first seen by the author on April 24, 1948. She complained at that time of amenorrhea and progressive enlargement of the abdomen. She stated that her skin had been itching, that the sclerae had been yellow for the past four months and that she had had trouble with her blood ever since she could

remember. Several times during her life she had ulcerations of the lower portions of both legs. History further revealed that the patient's appetite had been good but she had been unable to gain weight. The bowels were regular but she was unable to eat fat foods or such foods as cabbage, beans or onions because of the resulting flatulence. Her urine had become very dark in color in the last two months. At the time of the examination at North End Clinic the patient had been married for two years. She became pregnant in 1947 but had a miscarriage after four months. The first menstrual period was at the age of twelve. She flowed for two or three days every twenty-eight days. The last menstrual period was April 1, 1948. The remainder of the systemic review was essentially negative.

Further investigation into the case revealed that on September 12, 1936, when the patient was eight years of age, the diagnosis of sickle-cell anemia was made at the Children's Hospital of Michigan and a splenectomy was done during that admission. She required a number of blood transfusions from time to time and her best hemoglobin level during that period was around 9 grams. The last time she was seen in the clinic of the Children's Hospital was in 1937, at which time she was still having occasional attacks of recurrent abdominal pain and the low hemoglobin level of 9 grams.

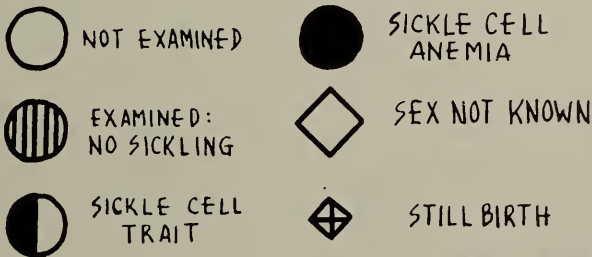
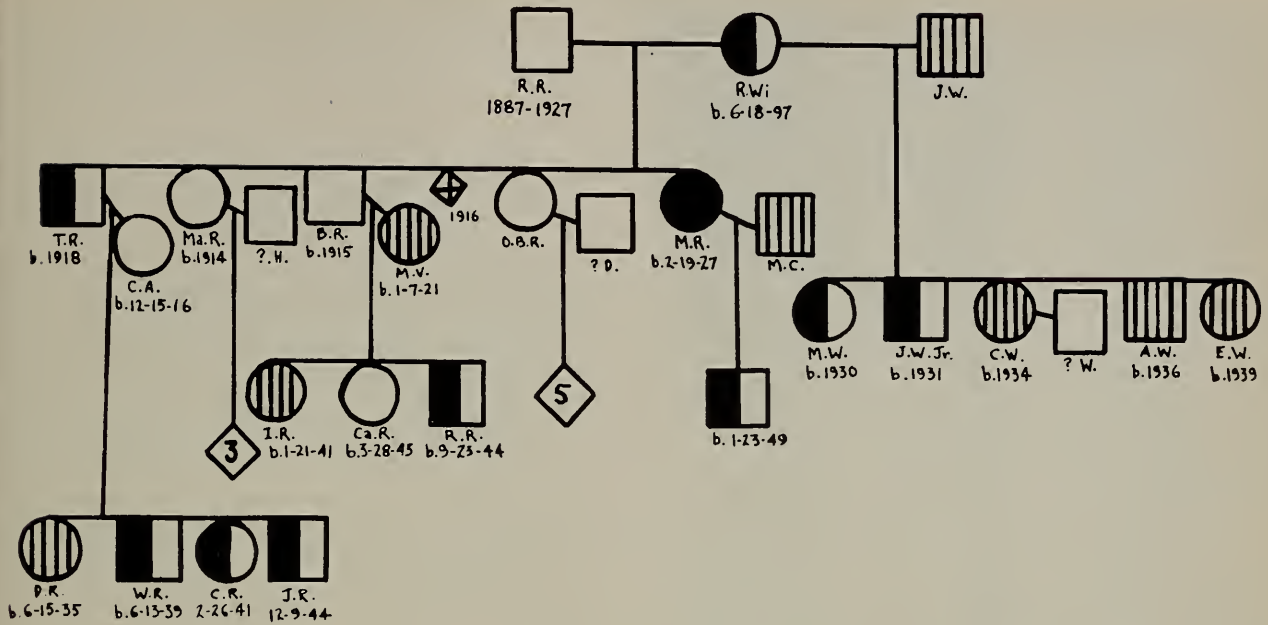
The family history is best summarized in the chart of the family tree (Fig. 1), prepared through the courtesy of Dr. James V. Neel of the Department of Human Heredity of the University of Michigan. From this chart it is noted that although nine individuals in her family possessed the sickle-cell trait, our patient is the only one with true sickle-cell anemia. It is regrettable that her father died in 1927 because blood studies on him would have been of inestimable value.

*Physical Examination.*—Height, 67 inches; weight, 108½ lbs.; temperature, 99°; pulse, 96; blood pressure, 110/70. The patient was an extremely thin, asthenic Negro female with the typical spindly legs seen in patients with sickle-cell anemia. The sclerae were markedly jaundiced. The heart was not enlarged to percussion, but a soft blowing apical systolic murmur could be heard. There was no axillary transmission of the murmur. The lungs were clear and resonant throughout. The liver edge, which was sharp and the surface of which was smooth, could be felt four to five finger-breaths below the right costal margin in the right mid-clavicular line. There was moderate tenderness of the liver on palpation. A well-healed T-shaped scar from the aforementioned splenectomy was seen in the left upper quadrant of the abdomen. The uterus was slightly larger than normal and the cervix was softened. The lower extremities showed scars of old ulcerations over the lower one-third of the tibial surfaces. The neurological examination was essentially negative. The laboratory data are summarized in Table I.

*Clinical Course.*—The patient was placed on a high carbohydrate, high protein, low fat diet with a supplement of at least two quarts of milk a day. She was also given choline dihydrogen citrate, 10 grains three times a

From the Department of Internal Medicine, North End Clinic, Detroit.

# SICKLE-CELL ANEMIA—DALE



HEREDITY CLINIC  
UNIV. OF MICHIGAN  
M.R.:KINDRED #1534

Fig. 1. Family tree

TABLE I. LABORATORY FINDINGS FROM  
NORTH END CLINIC

Date	Laboratory Data
5-25-48	Kahn negative. Urinalysis: Reaction acid; sp. gr. 1.013; albumin negative; sugar negative.
6-7-48	Hgb. 56%; RBC 3.00 million; WBC 10,000. Diff.: neutrophils 78%; lymphs. 21%; eosinophiles 1%. Has 50% sickling of RBC on counting chamber. Icterus index: 31 units. Vanden Bergh: direct 10 min.-0.85 mg. direct 30 min.-2.05 mg. indirect 2.5 mg. Cephalin-cholesterol flocculation test; slight trace after 48 hours. Urobilinogen in urine; Postive 1:20.
6-22-48	Icterus index 23.5 units. Hgb. 48%; RBC 3.40 million; WBC 12,500. Diff.: neutrophils 70%; lymphocytes 29%; eosinophiles 1%. Marked anisocytosis and poikilocytosis. Many sickle cells. Urine negative for bile.
8-24-48	Hgb. 60%; RBC 2.49 million; WBC 10,700. Neutrophils 68%; lymphocytes 26%; monocytes 4%; eosinophiles 1%; basophiles 1%; marked anisocytosis, macrocytosis; sickle cells, hypochromasia. There are 7 nucleated red cells seen in a count of 100 WBC's. Icterus index: 31 units.
9-8-48	Hgb. 67%; RBC 3.27 million; WBC 10,450. Neutrophils 82%; lymphocytes 15%; monocytes 3%. There are 6 normoblasts per 100 WBC. Red cells show anisocytosis and sickling. Icterus index: 23.5 units.
10-20-48	Hgb 58%; RBC 2.64 million; WBC 18,650. Neutrophils 82%; lymphocytes 17%; eosinophiles 1%. There are 13 normoblasts per 100 WBC. Many sickle cells and other bizarre shaped red cells.
3-8-49	Hgb 52%; RBC 3.48 million; WBC 14,400. Neutrophils 46%; lymphocytes 46%; monocytes 4%; eosinophiles 4%. Sickle cells, anisocytosis, poikilocytosis, hypochromasia seen on stained smear.



Fig. 2. Fresh ulceration of left ankle typical of sickle-cell anemia. There are scars of old ulceration seen more superiorly on the leg.





Fig. 3. Patient as seen post partum. Photographs show the typical spindly legs and asthenic habitus frequently seen in sickle-cell anemia.

day. A course of ferrous sulfate and liver extract was given with no apparent effect on the blood picture. The patient was seen weekly at North End Clinic, and on June 29, 1948, she was admitted to the Wayne County General Hospital because of the extremely low hemoglobin of 48 per cent. There she was given several blood transfusions, with general improvement in subjective feeling but no great improvement in her anemia. The laboratory data obtained at the Wayne County General Hospital are summarized in Table II. Meanwhile the pregnancy was progressing satisfactorily and the patient was being seen in the prenatal clinic of the Herman Kiefer Hospital, Detroit (Table III). The patient began to gain weight, and by October 12, 1948, it was noted that she had gained 5 pounds. During that examination the fetal heart tones could be heard. On November 16, 1948, after having had a 1,000 c.c. blood transfusion the patient felt much improved and weighed 121 pounds. The fetal heart tones were again heard at that examination and the fetal movements were very active. On January 23, 1949, the patient went into labor and was admitted to the Herman Kiefer Hospital where she was delivered of a male child weighing 3 pounds 12 ounces. The child was treated as a premature baby and upon discharge January 29, 1949, weighed 5 pounds 4 ounces and his general condition was good. On March 8, 1949, the patient's baby was examined and found to be healthy and active, and blood studies were done on the child. The hemoglobin was 12.4 grams and the sickling preparations were all positive, although the maximum of sickling in any preparation was 13 per cent. Dr. Neel made these studies and felt that on the basis of a more or less normal hemoglobin level and the observed low percentage of sickling that the baby probably has the sickle-cell trait rather than sickle-cell anemia.

TABLE II. FINDINGS AT WAYNE COUNTY GENERAL HOSPITAL

Date	Laboratory Data
<i>Blood Count</i>	
7-15-48	Hgb. 9.5; RBC 2,440,000; WBC 10,950; PMN 55, N 53, NF 2, L 36, M 7, B 2; two metamyelocytes. Many sickle cells.
7-19-48	Hgb. 9.7; RBC 3,270,000; WBC 24,150; PMN 78, N 66, NF 12, L 15, M 5, and E 2. Reticulocytes 6.0. Sickles.
7-21-48	Hgb. 7.5; RBC 2,540,000; WBC 15,100; PMN 67, N 65, NF 2, L 20, M 5, E 5, B 3. Reticulocytes 4.5.
7-23-48	Hgb. 9.3; RBC 3,240,000; WBC 23,850; PMN 63, N 55, NF 8, L 25, M 8, E 1, B 3; many sickle cells; poikilocytosis, moderate anisocytosis. Reticulocytes 2.8.
7-24-48	Hgb. 9.3; RBC 3,440,000; WBC 21,100; PMN 76, N 68, NF 8, L 20, M 4.
7-26-48	Hgb. 9.3; RBC 3,420,000; WBC 21,100; PMN 62, N 52, NF 10, L 24, M 11, E 1, B 2. Reticulocytes 6.8. Sickle cells.
7-29-48	Hgb. 8.3; RBC 2,780,000; WBC 17,950; PMN 65, N 63, NF 2, L 25, M 5, E 4, B 1. Reticulocytes 6.2. Sickle cells.
<i>Urinalysis</i>	
7-15-48	SG 1.007; negative sugar and albumin; microscopic SBC 1—3.
7-20-48	Negative sugar and albumin; microscopic WBC 2—4 and no RBC.
<i>Blood NPN</i>	
7-17-48	43.
<i>Chemistry</i>	
7-19-48	Van den Bergh immediate direct; bilirubin 6.2; Thymol turb. 3.5; thymol flocc. trace; cephalin flocc. 2 plus.
7-27-48	Van den Bergh immediate direct; bilirubin 2.6.
7-30-48	Total protein 7.6, serum albumin 3.4, serum globulin 4.2; Van den Bergh immediate direct; bilirubin 2.1; cephalin flocc. negative.
<i>Serology</i>	
7-17-48	Negative Kline exclusion.
<i>Vagina</i>	
7-24-48	Hanging drop—no Trichomonas.
<i>Cervix</i>	
7-24-48	Smear—occasional pus cell; Gram-positive bacilli; Gram-negative bacilli; no Gram-negative intracellular diplococci. Culture—no growth of N. gonorrhea in two days.

TABLE III. FINDINGS AT HERMAN KIEFER HOSPITAL

Date	Laboratory Data
9-8-48	RBC 2,880,000; Hgb. 58%. Appearance of RBC suggests sickle-cell anemia. Weight 110½ pounds B.P. 108/68
9-22-48	RBC 2,670,000; Hgb. 62%. Sickle cell found.
11-1-48	Admitted to Herman Kiefer Hospital. RBC 2,700,000; Hgb. 58%; Hematocrit 28%. 1000 c.c. whole blood given.
11-3-48	Icterus index 27.2; 500 c.c. blood given.
11-4-48	RBC 3,590,000; Hgb. 75%; Hematocrit 38.5%.
11-5-48	Discharged.
12-16-48	Re-admitted to Herman Kiefer Hospital.
12-17-48	RBC 2,210,000; Hgb. 40%; Hematocrit 22%.
12-18-48	500 c.c. whole blood given.
12-20-48	Icterus index 15.5; 500 c.c. whole blood given.
12-21-48	Discharged.
1-14-49	Re-admitted to Herman Kiefer Hospital.
1-15-49	RBC 2,400,000; Hgb. 65%; WBC 11,725. History revealed that the North End Clinic diagnosed anemia on this patient in April, 1948.
1-16-49	Discharged. Undelivered.
1-18-49	Re-admitted.
1-23-49	Delivered male child, 3 lbs. 12 oz.
1-24-49	RBC 2,170,000; Hgb. 44%; WBC 19,900.
1-28-49	RBC 2,580,000; Hgb. 34%; WBC 26,550.
1-29-49	Discharged. Melvin (baby) weight 5 lbs. 4 oz.

### Discussion

It can be seen from the diagram of the family tree that there is a "biologic dilution" of sickle-cell anemia. From these data it may be speculated that eventually sickle-cell anemia may be bred out of the Negro race, because of this dilution

(Continued on Page 1530)

# Protective Sterilization in Michigan

By Clarence J. Gamble, M.D.  
Milton, Massachusetts

DECREASING the number of children born to feeble-minded parents each year, many of them inheriting the mental handicap of their parents, may be likened to controlling an epidemic. While the offspring of defective parents are not all subnormal, the proportion of retarded children is high, and many of the children will in turn bear defective offspring. Moreover, all the children will be raised under the unsatisfactory upbringing of a feeble-minded parent. To a lesser degree the same disadvantages pertain to the descendants of the insane.

Selective sterilization has long been advocated as a means of controlling this perpetuation of mental abnormalities. Careful follow-up of cases has shown that the sacrifice involved is minimal. Tubectomy of the ovarian and spermatic tubes interferes with no function of the body other than the capacity for parenthood. There is no decrease in sexual activity, and libido is not diminished. Since the psychic and economic capacities of the mentally defective person are distinctly reduced, protection from the additional burden entailed by parenthood is especially valuable both to the patient and to the community.

To make the protection of sterilization available at governmental expense to patients in state institutions, laws have been passed by a number of states. The first to employ it as a public health procedure was Indiana whose eugenic sterilization law was passed in 1907. The constitutionality of such a law was assured by a test case carried to the United States Supreme Court by the heads of state mental institutions in Virginia. The decision ended with the pertinent and now well-known phrase: "Three generations of imbeciles are enough."

Michigan's first sterilization law, passed in 1913, was declared unconstitutional by the State Supreme Court in 1918. A new law applying to the mentally deficient was enacted in 1923 to eliminate the legal and constitutional weaknesses of its predecessor. In 1925 it was amended, giving the

court authority for ordering the operation. The law was contested in 1925 and 1926 and upheld as constitutional in both cases.

In 1929 a new law was passed which included insane and epileptic persons as well as the feeble-minded.<sup>1</sup> Its constitutionality has not been contested. The law provides that whenever the superintendent of a state institution for the insane or the feeble-minded shall be of the opinion that any inmate is likely to procreate children unless closely confined or rendered incapable of doing so, that such children would have a tendency to insanity or mental defectiveness, and that there is no probability that the condition of the person will improve, he shall notify the State Hospital Commission. With the written consent of the patient, his guardian and a close relative, sterilization may be done at state expense by x-rays, vasectomy or salpingectomy. Sterilization without such consent is rarely done, though the law provides that it can be after approval by the probate court and an examination by two physicians whom the court appoints.

Petitions for sterilization may also be presented to the probate court by close relatives or the guardian of a mentally abnormal person or by a superintendent of the poor or supervisor of a township. The law provides for appeal to the higher courts if the patient is not satisfied with the decision.

Statistics collected by the Human Betterment Foundation of California and Birthright, Inc.,<sup>2</sup> give the number of sterilizations under these laws reported by state institutions. They show that Michigan had reported a total of 2,851 operations at the end of 1947. This number is exceeded only by California with 18,716, Virginia with 5,232, and Kansas with 2,983.

For comparisons among the states, population should be taken into account. The sterilization rates per 100,000 inhabitants have, therefore, been calculated and are given in Table I and Figure 1. Michigan, with a total of 46 per 100,000 is seventeenth among the twenty-seven states which have sterilization laws. The average for these states is 81. The 117 persons operated on in 1947, amounted to 1.9, giving Michigan eleventh place. To smooth out the variations from year to year, the rates for the five years, 1943 to 1947 inclusive, have also been calculated. Michigan, with 1.6 per 100,000, occupies fifteenth place. The maxi-



# PROTECTIVE STERILIZATION IN MICHIGAN—GAMBLE

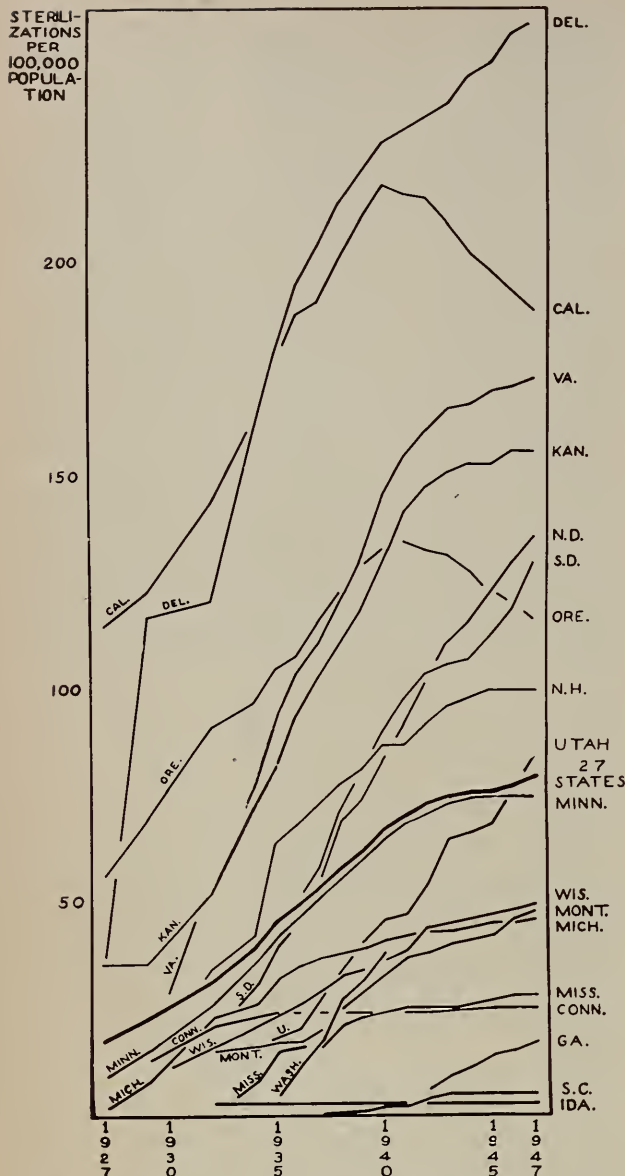


Fig. 1. Sterilizations reported by state institutions since the passage of the sterilization laws (cumulative figures). The broad line indicates the average values for the twenty-seven states having sterilization laws. The decrease in some of the curves results from a growth of population more rapid than the increase in the total number of sterilizations. Populations interpolated from censuses of 1930 and 1940 and estimate for 1947.

imum activity was during 1935, when 316 persons were protected.

Estimates of the prevalence of feeble-mindedness have varied, but if the conservative value of 1 per cent is used, there are 62,500 feeble-minded persons in Michigan. This is twenty-seven times the 2,290 feeble-minded persons who have been protected from parenthood. The assumption that the mentally deficient live, on the average, fifty years indicates that there are at least 1,250 new cases added to this group each year. The 100 tubectomies for mental deficiency in 1947 are less than 1 in 12 of these.

TABLE I. STERILIZATIONS REPORTED BY STATE INSTITUTIONS PER 100,000 POPULATION

Compiled from the reports of the Human Betterment Foundation and of Birthright, Inc.

Total Sterilizations to Jan. 1, 1948		Sterilizations per Year	
		1943-1947	1947
Del.	256	Del. 7.6	Utah 9.1*
Cal.	189	Utah 6.9	S. D. 8.2*
Va.	173	Va. 5.2	Del. 5.1
Kan.	156	Cal. 4.8	Cal. 4.1
N. D.	136	N. D. 4.3	Va. 4.0
S. D.	130	N. C. 3.4	N. C. 3.7*
Ore.	117	S. D. 3.1	N. D. 3.1
N. H.	100	Ind. 3.0	Iowa 2.7*
Utah	85	Kan. 2.9	Ind. 2.3
Minn.	76	N. H. 2.9	Ore. 1.9
Vt.	69	Ore. 2.6	Mich. 1.9*
N. C.	53	Ga. 2.2	Kan. 1.5
Neb.	51	Neb. 2.1	Mont. 1.2*
Wis.	49	Iowa 2.1	N. H. 1.1
Mont.	48	Mich. 1.6	Wis. 1.1
Ind.	46	Vt. 1.4	Ga. 0.7
Mich.	46	Wis. 1.3	Neb. 0.5
Iowa	29	Mont. 1.1	Miss. 0.5
Miss.	28	Minn. 0.7	Me. 0.3
Me.	25	Miss. 0.5	Conn. 0.3
Conn.	25	Conn. 0.4	Minn. 0.03
Okla.	24	Me. 0.3	
Ga.	17	S. C. 0.2	
S. C.	4	W. Va. 0.01	
Ariz.	3		
Ida.	3		
W. Va.	3		
Average for 27 states having sterilization laws 81		2.3	2.1

Populations interpolated from U. S. Census for 1940 and estimate for 1947.

\*1947 rate greater than 1943-1947.

An adequate program for the sterilization of the psychotic patient is more difficult to estimate, as many cases, due to age or the mildness of the disease, do not need protection. Reports for 1943 to 1946, the most recent years for which they are available, show that the annual average of first admissions with psychosis to Michigan state hospitals was 2,764, and of deaths, 1,461. The difference of 1,303 will, in the long run, equal the number of first discharges with psychosis. This is 109 times the twelve tubectomies performed on psychotics in 1947. It seems probable that protection would have been appropriate for a larger proportion.

The average physician is confronted with few cases of psychosis or mental deficiency. He is apt to transfer those that do come to him to specialists or state institutions. Each doctor, however, can do much to protect the mentally handicapped and their potential offspring. If he will enlighten the patients in his practice regarding sterilization, explaining to them that the only change in normal

(Continued on Page 1490)

# Diagnosis and Surgical Treatment of Deafness

By James E. Croushore, M.D.  
Detroit, Michigan

**B**EFORE TREATMENT is advised or instituted in any case of deafness, the deafness must be classified. The classification is made by the history, objective examination and the hearing tests. Hearing tests for classification are done both with the audiometer and tuning forks.

In order to understand just where the various types of deafness fit into the general heading of hearing defects, the following classification of deafness is offered:

1. Nerve (perceptive) deafness.
2. Conductive (obstructive) deafness.
  - (a) Obstruction of external canal: congenital atresia, cerumen, exostosis, furuncles, et cetera.
  - (b) Middle ear disease: otitis media, tubotympanitis, et cetera.
  - (c) Otosclerosis.

In nerve deafness, the bone conduction is down and the ability to hear high-pitched tones is first lost. In conductive deafness, the bone conduction is normal or increased, and the ability to hear low-pitched tones is first lost. A diagnosis of otosclerosis is justified if a conductive deafness is present in an individual who gives a negative history of ear infections and the objective examination is negative. One must be aware that a combination of factors may be present, resulting in a mixed deafness.

There is no effective treatment for nerve deafness. Fortunately, much can be done for the prevention and improvement of conductive deafness. The eradication of middle ear disease, removal of enlarged and septic tonsils and adenoids, and the application of radium to the orifices of the eustachian tubes will frequently be of value.

Otosclerosis is a new osseous formation affecting primarily the bony capsule of the labyrinth. In the early stages of the disease, the cartilaginous remnants which are normally found in the otic labyrinth are replaced by spongy bone. This spongy bone slowly scleroses and the progression

of the otosclerosing process results in a thickening of the otic capsule. Since the disease usually starts in the region of the oval window, into which the foot plate of the stapes fits, there occurs a fixation or ankylosis of the stapes. The ankylosis of the stapes prevents its free vibration so that sound waves are not transmitted into the inner ear. Naturally, the hearing acuity is diminished and the individual becomes aware that the hearing is being lost. The cause of otosclerosis has not been definitely established.

The amount of deafness produced by otosclerosis is proportional to the degree of fixation of the stapes. After a period of years, there develops a secondary nerve deafness, probably resulting from atrophy of disuse, or it may be a part of the process. For the fenestration operation to be of any value, it must be performed before the nerve degeneration becomes advanced. It would be useless to have sound waves reach the inner ear if they could not be transmitted to the brain where they are interpreted as sound.

An individual with otosclerosis must fulfill certain requirements in order to be a favorable candidate for the fenestration operation. The general health must be good. Mild diabetics who are easily controlled can safely be operated. The ideal age is the twenty- to forty-year group. People over fifty-five probably should not be operated upon. The extreme age limits the writer knows of are a woman over sixty years and a child of eight, who were operated upon and both obtained very good results. There should be a negative history of ear infections, or if otitis media has been present in earlier years, there should be no evidence of residual infection. The hearing loss should be at least 40 decibels. The patient should have a good understanding of just what is entailed in the operative procedure and have an open mind about all possible factors that may arise. With this knowledge, the patient must be willing to submit to an entirely elective surgical operation.

What benefits can the patient expect from the operation? Statistics reported by various operators in several sections of the country reveal that approximately 70 per cent recover permanent practical hearing for the average conversational voice. Also, the annoying tinnitus disappears in almost all ears operated upon. Sound is natural, whereas with a hearing aid it is artificial. In order to receive practical hearing, the improvement must rise to or above the 30 decibel level.

Presented at the third annual Postgraduate Clinical Institute, Detroit, Michigan, March 23, 1949.



Patients who are awake when the fenestra is made will hear instantaneously. But since most of them are asleep and the cavity is packed for six days, they are not aware of improvement. The hearing should return in two to six weeks as that much time is required for operative reaction to subside and permit the flap to transmit sound waves. Dizziness is an annoying factor for about ten days postoperatively. The dizziness is proportional to the amount of postoperative labyrinthitis.

A certain percentage of the openings will close by new bone formation within a year. There is much evidence that if the fenestra remains open for a year, it will almost certainly remain open permanently.

The fenestration operation is the only treatment for deafness due to otosclerosis that is of any value. Passow in Germany in 1896 first made an opening into the labyrinth with hearing improvement which lasted only a few days.

Jenkins in England and Barany in Vienna made contributions to the operation. Holmgren in Sweden further improved the technique and obtained better results. Sourdille in France worked on it from 1924 to 1937 and elaborated a complicated three- or four-stage operation. He was the first to have a window remain open for five years. Lempert of New York first published his technique in 1938. Lempert combined Sourdille's multiple-stage procedures into a practical one-stage operation. In 1941 Lempert described the "fenestra nov-ovalis" which is the technique used today by the operators doing the operation.

Some operators use local anesthesia combined with deep narcosis. This is the anesthesia used at Harper. Various combinations of local and general anesthesia have been worked out by different individuals. The operation usually requires from two to four hours; thus, it is essential that the safest and least shocking type of anesthesia be employed.

The technique developed by Lempert employs the endaural approach. By a combination of three incisions, or a single incision, where the auricle joins the external canal, the auricle can be mobilized and the mastoid cortex exposed. With an electrically driven dental bur and specially designed curettes, the cortex and mastoid cells are removed and the semicircular canals skeletonized. The posterior bony canal is then removed with special small rongeurs, care being taken not to tear the membranous canal or ear drum. The skin of the

posterior canal is now incised and reflected posteriorly. This skin flap is continuous with the ear drum and is a marked improvement over a skin graft as the flap retains a blood supply. The incus and the head and neck of the malleus are removed so the flap may lie flat over the fenestra. At this point a magnifying loupe or dissecting microscope is now employed while the opening is being made into the anterior aspect of the horizontal semicircular canal with a finishing bur. The most exacting care is necessary while making the fenestra in order not to injure the facial nerve or the delicate membranous inner ear. Even by gently touching the membranous labyrinth, it may be ruptured and the endolymph escape, producing complete and permanent deafness.

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## PROTECTIVE STERILIZATION IN MICHIGAN

(Continued from Page 1488)

functions is the desired one that no children are produced, the needed consent of the mentally abnormal and his family will be much more easily secured.

### References

1. Michigan Laws, 1929, No. 281; Compiled Laws, Secs. 6646 to 6653.
2. Publication No. 5, Birthright, Inc. 134 Nassau St., Princeton, New Jersey, 1948.

### ON THE RUN . . . . .

Normally, restraint of automatic arm-swinging on one side reinforces arm-swinging on the opposite side. In unilateral pyramidal lesions such restraint is not thus effective, whereas in extrapyramidal lesions the opposite arm-swinging occurs if there is not much hypertonus.

\* \* \*

Subcutaneous granulomata from beryllium may occur in those who cut themselves on broken fluorescent lamps.

\* \* \*

The use of the handkerchief is, next to bed-making, one of the most important actions in contamination of the air with micro-organisms from the respiratory tract.

\* \* \*

In a heart with tissue respiration impaired by myocardial damage, a full stomach elicits reflex coronary constriction with dangerous anoxemia.

\* \* \*

In providing medical care for people over 65, it must be assumed that at least half will have some chronic disease.

Selected by R. S. REVENO, M.D.

JMSMS

# Detroit Physiological Society

Meeting of October 29, 1949

## Staphylokinase: A Proteolytic Enzyme Activator

EARL B. GERHEIM

*From the Department of Physiology and Pharmacology, Wayne University College of Medicine, Detroit*

Among the tests used to determine the pathogenicity of *staphylococcus aureus* strains are the "coagulase" test and the demonstration of proteolytic activity. The mechanism for these reactions has not been too clearly defined in the past. One of the explanations for these phenomena was that the "coagulase" is a proteolytic enzyme which in a low concentration caused clotting, and lysis if the concentration was increased. Heat liability studies have clearly shown this is not true. The mechanism for the proteolytic activity is analogous to the action of *streptokinase*, namely, a bacterial kinase activates a proenzyme found in plasma. A comparison of the specificity of *streptokinase* and *staphylokinase* indicates a dissimilarity. While the former activates a proenzyme found in human plasma (or serum) the latter serves as an activator for the proenzyme in dog and rabbit plasma. In addition, these two bacterial factors differ in the rate of maximal enzyme development; *streptokinase* acts almost immediately but the *staphylokinase* takes a fifteen to thirty-minute incubation period.

\* \* \*

## Transamination in Nutritional Muscular Dystrophy

DANIEL H. BASINSKI

*Children's Fund of Michigan*

The aspartic-glutamic transaminase activity of skeletal muscle homogenates from vitamin E-deprived rabbits and guinea-pigs was measured and found to be appreciably lower than that of normal control animals. The decrease of activity was consistent whether it was calculated on the basis of wet or dry weight of tissue or on the total nitrogen content of the tissue. That loss of transaminating coenzyme was not a factor in diminished enzyme activity was demonstrated by the lack of effect when pyridoxal phosphate was added to the system. The possibility that the lowered rate of trans-

amination in dystrophic muscle was an artifact brought about by an enhanced destruction of oxaloacetic acid by dystrophic muscle *brei* was ruled out by recovery experiments which showed that on the contrary, normal muscle *brei* caused a greater loss of excess oxaloacetate.

The significance of these results in the altered energy metabolism of dystrophic muscle was discussed.

\* \* \*

## Changes in Plasma Volume and Circulating Proteins Following the Removal of Ascitic Fluid in Laennec's Cirrhosis

GLENN I. HILLER, E. R. HUFFMAN AND  
STANLEY LEVEY

*Wayne County General Hospital and  
Wayne University*

Changes in plasma volume (T-1824) and total circulating proteins were investigated, in seven instances, before, immediately after, and eight hours following the complete removal of ascitic fluid from five patients with advanced Laennec's cirrhosis.

In each instance, immediately following removal of the ascitic fluid, the plasma volume, total circulating protein and total circulating globulin fell, the maximum fall being 25, 29 and 31 per cent, respectively, of the control values. In four instances, there was an appreciable increase in total circulating albumin. Serum protein concentrations varied from the control values but followed no consistent pattern.

Eight hours later, the plasma volume was elevated in five and lowered in two instances, the maximum deviations from the control values being 22.9 and 10.3 per cent, respectively. At this time, in most instances, the total circulating protein and the total circulating globulin were appreciably lowered. In four instances, the total circulating albumin was higher, the maximum increase being 56.8 per cent. Concentrations of the serum proteins at the eight-hour period varied from the control values but followed no consistent pattern.

These data offer an explanation for the periph-

*(Continued on Page 1534)*





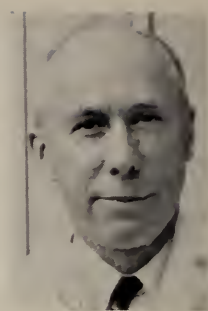
FRANZ G. ALEXANDER, M.D.  
*Chicago, Illinois*



WALTER C. ALVAREZ, M.D.  
*Rochester, Minnesota*



WM. L. BENEDICT, M.D.  
*Rochester, Minnesota*



MARION A. BLANKENHORN,  
M.D.  
*Cincinnati, Ohio*



F. BAYARD CARTER, M.D.  
*Durham, North Carolina*

## Michigan Postgraduate Clinical Institute

March 8-9-10, 1950

Book-Cadillac Hotel — Detroit

Some of the

Thirty-nine Guest Speakers  
on the Institute Program



GEORGE CRILE, JR., M.D.  
*Cleveland, Ohio*



RICHARD H. FREYBERG,  
M.D.  
*New York City*



J. MASON HUNDLEY, JR.,  
M.D.  
*Baltimore, Maryland*



JULIAN P. PRICE, M.D.  
*Florence, South Carolina*



LEO G. RIGLER, M.D.  
*Minneapolis, Minnesota*



FRANCIS E. SENEAZ, M.D.  
*Chicago, Illinois*



I. SNAPPER, M.D.  
*New York City*



WALTMAN WALTERS, M.D.  
*Rochester, Minnesota*

## One's Fellow Man

The approaching year-end in the merchandising world is at once a period of assessment, intense current business activity and planning. The earnings of the previous months and quarters have been accumulated and must be evaluated in terms of planning for the forthcoming year. Nevertheless, the Christmas shopping rush remains, and the year-end clearance sales of stocks that have not moved are still to be organized.

It is of interest to consider that the doctor, too, is a merchandiser of sorts. True, he is disbursing services and counsel rather than material goods. But the parallel exists, and he might well note the example of his business colleagues. There will inevitably be a few medical practices and theories that have not "moved," and had best be marked for clearance. Medical change is too pronounced for it to be otherwise, and there is no room in modern medicine for the doctor who is unwilling to improve his "stock." The earnings of the previous quarters can be evaluated, not in terms of dollars and cents nor according to the chrome on the present car, but rather in terms of the inner satisfaction of a job well done. The "sales appeal" of the medical profession collectively merits more than a passing glance. Are the people of the community generally aware of medical problems and necessities and are they convinced of the sincerity of their doctors?

As a basis for planning the program of the forthcoming year—and a thought for the Christmas Season too, if you will—the physician could consider the purpose, the *raison d'être*, of a medical practice. No one among us has time to waste on sentimentality concerning the human service aspects of a doctor's life. But one cannot practice sound medicine without remembering that his subject, in the final analysis, is not a mere collection of disassociated symptoms and scientific facts, but rather is one's fellow man, his physical and spiritual well being, his occupations and aspirations, and his human frailties.

*W.E. Barstow M.D.*

President, Michigan State Medical Society

*President's*



*Page*



# UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan

## NEW COURSE ON CANCER—January 17-20, 1950

Registration: Tuesday, January 17, 1950—8:00-8:45 A.M., Room 2040, University Hospital  
Introduction: 8:45-9:00 A.M. Introduction by Dr. H. H. Cummings

HOUR	TUESDAY—Jan. 17	WEDNESDAY—Jan. 18	THURSDAY—Jan. 19	FRIDAY—Jan. 20
A.M. 9:00 to 10:00	The nature, biology, genesis and implications of cancer. Dr. Carl V. Weller	Cancer of skin Dr. Arthur C. Curtis	Cancer of breast Dr. Frederick A. Collier	Cancer of cervix Dr. Norman F. Miller
10:00 to 11:00	Pathology of cancer of lung, bronchi and mediastinum. Dr. Weller	Pathology of cancer of stomach and bowel. Dr. R. C. Wanstrom	Pathology of cancer of prostate and bladder Dr. C. C. Congdon	Pathology. Cancer in childhood Dr. A. C. Upton
11:00 to 12:00	Clinic: (Sections) A: Thoracic Surgery B: Medicine C: Urology D: Pediatrics	Clinic: (Sections) A: Medicine B: Urology C: Pediatrics D: Thoracic Surgery	Clinic: (Sections) A: Urology B: Pediatrics C: Thoracic Surgery D: Medicine	Clinic: (Sections) A: Pediatrics B: Thoracic Surgery C: Medicine D: Urology
P.M. 1:30 to 2:45	Clinic: (Sections) A: Thoracic Surgery B: Medicine C: Urology D: Pediatrics 2:45 to 3:15 Intermission	Clinic: (Sections) A: Medicine B: Urology C: Pediatrics D: Thoracic Surgery	Clinic: (Sections) A: Urology B: Pediatrics C: Thoracic Surgery D: Medicine	Clinic: (Sections) A: Pediatrics B: Thoracic Surgery C: Medicine D: Urology
3:15 to 4:30	Seminar (entire class) Thoracic Surgery Roentgenology  Pathology Chairman: Dr. Alexander	Seminar (entire class) Medicine & Surgery Roentgenology  Pathology Chairmen: Drs. Collier & Pollard	Seminar (entire class) Urology Roentgenology  Pathology Chairman: Dr. Nesbit	Seminar (entire class) Pediatrics Surgery  Roentgenology Pathology Chairman: Dr. Wilson

Friday evening, January 20. Dinner and discussion period. Allenel hotel.

THIS IS THE SECOND POSTGRADUATE COURSE TO BE OFFERED AS A PART OF THE PROGRAM OF ACCENTUATED CANCER TEACHING AT THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL. Registration limited to 24 Michigan physicians. Fee \$25.00. Application for enrollment should be made to Dr. H. H. Cummings, Chairman, Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan.

# Editorial

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## THE WELFARE STATE

THE MODERN ideas of a Welfare State are a condition in which almost everybody expects to be taken care of, to be made secure. The State is one's guardian. One does not need to worry about the present or the future, the State will look after him and will provide for his needs. Such a State always starts with making provision of a few items for everybody, and ends up with many, or all his requirements. Some nations in Europe at the present time are shining examples of what may occur.

The term "Welfare State," as we have known it, represents a condition which we fear—socialism. Americans have always been rugged individualists, have been able and proud to look after themselves. Recently we are hearing a different interpretation of the Welfare State. A campaign is just concluded in New York, looking to the election of a United States Senator in which the Welfare State has been a main issue. One side abhorred the idea as being something foreign to American ideals; the other side has praised the Welfare State as being something desirable, something which our people need.

Senator Hubert H. Humphrey, Junior Senator from Minnesota, in a discussion over the Town Meeting of the Air Tuesday evening, November 1, praised the Welfare State as being an attempt to live up to the provisions of our Constitution, which says a function of Government is "to provide for the general welfare." Others in the Administration—Ewing, Truman, Pepper—have praised the Welfare State as the Washington bureaucrats see it. Is this a movement stimulated by politicians and would-be office holders to befuddle the minds of our people so that in accepting the provisions of modern socialism, which they are teaching, it would seem that the purposes of our Constitution are being fulfilled?\*

The proposed Welfare State, if carried to a logical conclusion, would give control of our very lives and existence to office holders and bureaucrats. Socialized medicine is just one feature of this program. We are vitally interested in that, but we are just as profoundly interested in the whole picture.

\*Senator Humphrey's subsequent statements regarding voluntary insurance belie his complete belief in the Welfare State.

## POLICE STATE

A YEAR AGO it was our duty to report the indictment of the Oregon State Medical Society, the Oregon Physicians Service, and others, by the Attorney General of the United States on the charge of conspiracy. The allegation was that these organizations and doctors in Oregon were conducting a monopoly in their effort to provide good medical and hospital service for their patients on a prepayment basis. At that time, there was threat of another suit in California, and we were hearing rumors of investigation in the East and in Michigan. We believed then, as we do now, that this was a part of a studied program from Washington to vilify the medical profession; to make the medical profession look ridiculous in the eyes of the general public; to give the impression to the casual observer that the medical profession must have very serious shortcomings if it were guilty of things calling for investigation and punishment by the Justice Department.

In our June JOURNAL this year, we made some comments upon this same general topic. News broke early in October, 1949, that the FBI had been visiting the offices of twenty-two medical societies and organizations to investigate the records. The American Medical Association's Board of Trustees announced that somebody (could it have been the FBI?) broke into the Board Room of the American Medical Association in February. Late in October the FBI agents were still at work in the American Medical Association offices, going over all records.

On October 6, an FBI special agent entered the headquarters office of the Michigan State Medical Society and demanded to see all of our records back to 1934. He submitted a letter, *dated August 25, 1949*, requesting permission to review the records of the Society for "investigation of alleged violations of the Federal Anti-Trust Laws in the medical fields." Full access was given to all minutes and records in the office. None was removed from the office. The FBI agents also visited Michigan Medical Service in Detroit, looking for anything which they might use to our disadvantage.

Has the Federal Government converted itself



into a police state? This comes suspiciously soon after the President's Reorganization Plan No. 1 was defeated. That plan, as our members all know, would have put Oscar Ewing in the Cabinet in charge of all health services. We feared it would mean the end of an independent progressive medical profession and the beginning of the medical chaos which is now rampaging in Great Britain. We opposed the Reorganization Plan and succeeded in getting it rejected by the Senate because it was not in conformity with the Hoover Commission recommendations for a United Medical Administration independent of the Department of Welfare. This present investigation has the earmarks of a reprisal measure.

That we have gone a long way down the road of police statism is manifested by a consideration of some regulations now in effect. Many of us have sons or daughters and their families in Germany now in connection with the rehabilitation program. Most of them went over under the auspices of the Army, but in the recent reshifting are now under the direct control of the State Department. That program is of great value, and most decidedly needed, but do you know the terms of service in Germany? These young American citizens may write letters home to their families, but those letters cannot be distributed beyond the family, they must not be published or distributed unless *they have been censored and approved by the FBI* in Germany. We call that a fair degree of police state, and we believe the American people should understand the situation.

## DUTY OF THE AMERICAN MEDICAL ASSOCIATION

THE PLETHORA of investigations by the Federal Government, and its police, the FBI, causes us to ponder where this campaign will end. Anyone with half an eye could foresee this gamut of investigations. The Michigan Delegates to the House of Delegates of the American Medical Association saw clearly what was coming and at the annual session at Atlantic City in July offered a resolution to the effect that the AMA accept any such indictment of any State Medical Society as an indictment of itself; that it declare itself in on any such action; and that it make every resource of the American Medical Association available for the complete defense of such action.

The Resolution met the approval of many of the delegations from other states, but at the spe-

cific request of the Board of Trustees of the AMA and against the best wishes of the Michigan delegation, the resolution was withdrawn. If that resolution were now on the books, the bargaining position of the whole medical profession would be greatly improved, because it would show foresight and forethought for our good name.

To be indicted is no proof of guilt, but such an action unavoidably carries a degree of taint with it, and places the burden on the defendant, of clearing a good name instead of making the accuser prove his case.

The medical profession has a duty to perform.

## COMPULSORY WELFARE PLANS

LEST OUR MEMBERS be under the impression that our drive against the Welfare State (State Socialism) is temporarily in abeyance because of the defeat of the President's Reorganization Plan No. 1, the recess of the Congress, and the reported likelihood that some of the National Health Plan Bills now before the Congress will not be enacted, we are reporting on the progress of the compulsory program throughout the nation.

The growing interest in compulsory welfare plans this year is evidenced in sixteen state legislatures where seventy-one compulsory cash sickness bills were introduced. Last year there were forty-two similar bills. Sixty-nine of this year's bills were defeated. The New York bill became law and the Washington Bill passed both houses, but must also be subject to a referendum vote in November, 1950.

Four states now have compulsory cash sickness insurance: Rhode Island, California, New Jersey, and New York, with Washington to be decided. The Rhode Island plan is a state monopoly. In California there is a state fund, but private interests may compete, and about one-third of the workers are so covered. The New Jersey plan is more liberal, and just over one-half are privately covered. In New York, broad opportunities are offered for private insurance.

The seventy-one bills in the legislatures this year were two in Colorado, eight in Connecticut, one in Delaware, two each in Florida, Illinois, and Maryland, fourteen in Massachusetts, three in Minnesota, one each in Montana, Nevada, and New Mexico, twenty-one in New York, three in Pennsylvania, two in Tennessee, five in Washington, and three in Wisconsin. These all carried

weekly benefits from as low as \$5.00 to as high as \$36.00.

These are an entry into the compulsory health insurance field, and may be a portent of further activity on the state level until such time as the national program may become a reality.

## PREVENTION OF BLINDNESS

**T**HE HIGH INCIDENCE of blindness resulting from glaucoma should give all physicians reason to pause and consider since most of it is preventable. Reliable statistics show that 66,000 persons in this country (one-eighth of all the adult blind) are blind in one or both eyes as the result of glaucoma, and most authorities are in agreement that another 800,000 persons have the disease in its early stages without realizing it. Blindness in this last group can be prevented if the individual can be found, warned, and treated in time. The family physician most often has the opportunity to see the patients first and so can be an important factor in preventing loss of sight from glaucoma. This has been aptly demonstrated by a joint exhibit of the Detroit Society for the Prevention of Blindness and the Grand Rapids Association for the Blind and for Sight Conservation at the recent meeting of the Michigan State Medical Society in Grand Rapids.

The physician should become suspicious of glaucoma in his patient over forty years of age, if the history shows frequent changes of glasses without relief, headaches after movies, halos or rainbows around lights, and intermittent attacks of blurry vision. Every physical examination should include a test of visual acuity and an ophthalmoscopic examination of both eyes. The former will reveal subnormal acuity in some early cases of glaucoma, and the latter may reveal a glaucomatous cupping of the optic disc.

Every suspicious case should be referred for further study to an ophthalmologist, who can establish the diagnosis by more refined tests, and much blindness can thereby be prevented. The physicians of Michigan should co-operate with the Detroit Society for the Prevention of Blindness and the Grand Rapids Association in their work in attempting to save sight.

EDWIN L. COOPER

\* \* \*

**EDITOR'S NOTE:** The Editor would like to add one additional thought to Dr. Cooper's editorial

on glaucoma. The alert ophthalmologist can detect a potential glaucoma before there has been serious disc excavation or contraction of the field by watching the increased tension and other symptoms, and the progress of this glaucoma may be stopped by the use of miotics. Small doses of pilocarpin will do no harm. The possibility of avoiding a threatened glaucoma is abundantly worth the effort and intensely satisfying to the ophthalmologist.

## THE MICHIGAN HEART ASSOCIATION

**T**HE MICHIGAN Heart Association was formed by a committee appointed by the Council of the Michigan State Medical Society in the fall of 1948 and was duly incorporated under the laws of the State of Michigan on February 17, 1949. Its Articles of Incorporation state that it is formed for the following purpose: "... the acquisition, dissemination and application of knowledge concerning the normal heart and circulation and the causes, diagnosis, prevention and treatment of disorders of the circulation and diseases of the heart, blood vessels and lymph vessels . . ." The Michigan Heart Association, therefore, is engaged in a community service program of research and education for the greater benefit of the people of Michigan.

In order to fulfill these aims, the Michigan Heart Association has become affiliated with the American Heart Association whose program and purposes are in harmony with its own, and has become a member agency of the United Health and Welfare Fund of Michigan for the purpose of raising the funds necessary for the accomplishment of its aims.

Already much has been accomplished toward perfecting an organization that can serve the profession and the citizens of this State in making available the very latest developments in the diagnosis and treatment of cardiovascular disease. In the field of research, the Michigan Heart Association actively supports several research projects approved by its medical advisory committee, embracing studies in congenital heart disease, electrocardiography in the young, cardiac surgery, coronary thrombosis, congestive failure, cardiac roentgenology and industrial cardiology. In the field of education the principal contribution of the Michigan Heart Association to date is its financial support of the Michigan Rheumatic Fever Control

(Continued on Page 1554)



## POSTGRADUATE CONTINUATION COURSES

Wayne University College of Medicine

December 5, 1949—March 11, 1950

These courses are open to all qualified persons.

Veterans who are not Residents in a Detroit hospital and who have Certificates of Eligibility under the GI Bill, should make arrangements for tuition and books, as provided by the GI Bill, by presenting these Certificates of Eligibility to Mr. Arthur Johnson, Veteran's Administrator at Wayne University, 5001 Second.

If you do not possess a Certificate of Eligibility, please call Mr. Johnson at Temple 1-1450, Veterans Affairs, before going to his office, and he will inform you what papers it is necessary to bring with you. *This must be completed before you register.*

Registration for these courses can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, *before December 3, 1949.*

<i>Title of Course</i>	<i>Place</i>	<i>Time</i>	<i>Fee</i>
<b>Anatomy</b>			
Surgical Anatomy (Limited to 20 Senior Surgical Residents)	College of Medicine	Tuesday, 3-5	\$35.00
<b>Pathology</b>			
Beginning Hematology	College of Medicine	Tuesday, 1-5	\$50.00
Neuropathology	College of Medicine	Friday, 1-5	\$50.00
Pathology of Neoplasms	College of Medicine	Wednesday, 1-5	\$50.00
Histopathology of Ear, Nose and Throat	College of Medicine	Friday, 4-6	\$25.00
<b>Physiology and Pharmacology</b>			
Blood	College of Medicine (Two Quarters)	Friday, 4-5:30	\$30.00
<b>Physiological Chemistry</b>			
P. Chemistry Seminar	College of Medicine	Thursday, 3:30-4:30	\$15.00
Intermediary Metabolism	College of Medicine	Friday, 1-2	\$15.00
<b>Dermatology</b>			
Dermatology Seminar	Receiving Hospital	Wednesday, 10-11:30	\$15.00
Seminar in Dermopathology	College of Medicine	Tuesday, 11-12	\$15.00
Conf. on Venereal Diseases	Social Hygiene Clinic	Thursday, 1-2:30	\$15.00
Superficial Mycoses	Receiving Hospital (4th fl. Mycology Lab.)	Thursday, 10:30-12	\$30.00
<b>Internal Medicine</b>			
Medical Seminar	Receiving Hospital	Thursday, 6:30-7:30	\$15.00
Medical Conference	Receiving Hospital	Saturday, 10:30-12	\$15.00
Gastroenterology	Receiving Hospital (Limit 10)	Saturday, 8-9	\$15.00
Medical X-Ray Conf.	Receiving Hospital (Limit 10)	Tuesday, 11-12	\$15.00
<b>Surgery</b>			
Seminar in Surgery	College of Medicine (Limit 20)	Monday, 4-5	\$15.00
<b>Comprehensive Unit Course</b>			
Basic Ophthalmology	College of Medicine (Limit 10)	Full Time (9 Months)	\$900.00

This class will not be presented until September of 1950, but applications are being accepted at the present time, and the new class will be selected in March of next year. Application blank will be sent upon request to the Postgraduate department at the College of Medicine, 1512 St. Antoine, Detroit 26.

# Michigan Heart Association

## Allocations for Research and Education

### 1. UNIVERSITY OF MICHIGAN MEDICAL SCHOOL, DEPARTMENT OF PEDIATRICS

(Dr. J. L. Wilson, University Hospital, Ann Arbor)

*Grant of \$4,100.00 for research in congenital heart disease.*

1. Further work in congenital cardiac disease, especially in oxygen saturation and blood gas analyses studies.
2. Travel fellowship to visit other cardiac centers.

### 2. HENRY FORD HOSPITAL, DEPARTMENT OF PEDIATRICS

(Dr. R. F. Ziegler, Henry Ford Hospital, Detroit)

*Grant of \$3,000.00 for research in electrocardiography as applied to infants and children.*

For the past four and a half years, Henry Ford Hospital has been interested in a detailed study of the electrocardiograms of normal infants and children, with a determination of such data as would be applicable not only to normal individuals, but also to the understanding of such basic problems as ventricular enlargement and defects of intraventricular conduction. In the latter field, a growing clinical practice has provided abundant material for detailed electrocardiographic studies; in addition, however, certain experimental work is indispensable for further understanding of problems involved in the derivation of specific electrocardiographic patterns.

Important work which needs to be done includes the production, in experimental animals, of right and left ventricular hypertrophy. From such animals, the following data could be derived:

1. Correlation of precordial electrocardiograms with direct leads from the epicardial surface of the heart.
2. Correlation of the above with intracardiac leads.
3. The influence in right and left ventricular hypertrophy of bundle branch block, artificially produced.
4. A correlation of electrographic and physiological data derived from the above, plus cardiac catheterization studies.

### 3. HENRY FORD HOSPITAL, DEPARTMENT OF SURGERY

(Dr. Conrad Lam, Henry Ford Hospital, Detroit)

*Grant of \$3,000.00 for research in cardiac surgery.*

1. Investigation of pulmonary blood flow after pneumonectomy or ligation of the pulmonary artery.
2. Continuation of experiments to see if the aortic valves can be transplanted.
3. Continuation of experiments to see if suture anastomoses of blood vessels grow. This is of particular importance in relation to operations for coarctation in infants or young children, as well as in the various shunt operations in tetralogy of Fallot.
4. Continuation of study of closure of interatrial and interventricular defects.

### 4. HENRY FORD HOSPITAL, DEPARTMENT OF MEDICINE

(Dr. Ben E. Goodrich, Henry Ford Hospital, Detroit)

*Grant of \$3,000.00 for research in coronary thrombosis.*

Heparin is being used as a part of the anti-coagulant therapy of patients threatened with, or suffering from, coronary artery thrombosis. It has been established that protamine, introduced into blood vessels, neutralizes the effect of heparin. At the present time, there is an extensive use of protamine zinc insulin in the treatment of diabetes. Is it possible that some portion of the protamine has an undesirable effect on the coagulation of blood of diabetics who are already predisposed to coronary artery disease by reason of their diabetes?

It appears reasonable to attempt to discover the quantity of protamine and the quantitative effect of such protamine on the coagulability of blood in patients receiving the medication. The clinical study would relate to the effect on blood coagulability of various forms of insulin. The animal study to supplement the above would determine the ranges of effect in degrees that would not customarily be used clinically.



**5. WAYNE UNIVERSITY SCHOOL OF MEDICINE, DEPARTMENT OF MEDICINE**

(Dr. Gordon B. Myers, Receiving Hospital, Detroit)

*Grant of \$15,000.00 for research in diseases of blood vessels.*

The first phase of the study will be concerned with the determination of potassium and sodium balance in cardiac decompensation and during recovery. The balance studies will be correlated with various cardiac function tests to evaluate their significance. Cardiac output will be determined with the aid of catheterization if equipment is obtained. Since digitalization in animals is accompanied by shifts of sodium into and potassium out of heart muscle cell, patients will be divided into two groups, depending upon whether cardiac glycosides are given, in order to gain further data on the influence of digitalis and allied drugs on blood and muscle potassium. The second phase of the study will be to determine the effect of potassium pushed to the limit of tolerance (as judged by blood level, electrocardiogram, and clinical manifestations) upon cardiac function in (a) the digitalized, and (b) the supplementary potassium to be of value in refractory congestive failure and it is hoped that these studies will provide quantitative data on the optimal intake of potassium and sodium in congestive failure.

**6. HARPER HOSPITAL, DEPARTMENT OF LABORATORIES**

(Dr. Kenneth Corrigan, Harper Hospital, Detroit)

*Grant of \$6,500.00 for the study of anomalies of the heart by means of x-ray examinations and cardiac catheterization.*

1. Cardiac surgery on congenital heart patients and on experimental animals: A method has been devised whereby septal defects can be created in animals and the abnormal physiology studied. The defects can, at a later date, be repaired and the circulation restored to normal.
2. Development of new diagnostic techniques: There are, at the present time, certain research procedures which have been established in animals and which appear to have direct and valuable bearing upon clinical application in the study and evaluation of heart

conditions preparatory to cardiac surgery. It is desired to perform more work on these procedures and bring them to direct clinical utilization.

3. Research and development program to study and further evaluate techniques now in existence, including the study of cardiac physiology and the measurement, localization and precise evaluation of cardiac defects: Certain of the procedures mentioned in paragraph one have been shown applicable to this work but further work is badly needed to evaluate the procedures now known and to develop new ones.

**7. INDUSTRIAL CARDIOLOGY**

(Dr. John G. Bielawski, Detroit)

*Grant of \$6,000.00.*

This research project is concerned directly with the problems of heart disease in industry, both labor and management. It will establish proper methods of discovery of heart disease when first entering employment and methods of determining the working capacity of those afflicted and placement in jobs suitable to their capabilities.

**8. RHEUMATIC FEVER CONTROL PROGRAM OF THE MICHIGAN STATE MEDICAL SOCIETY**

*Grant of \$32,000.00.*

The Rheumatic Fever Control Program is concerned with the detection of rheumatic fever and rheumatic heart disease. It is a state-wide program grouped around the important medical centers of the state where adequate facilities for diagnosis are available. The program is fundamentally educational.

A feature of the Rheumatic Fever Control Program is thirty Consultation and Diagnostic Centers scattered throughout the State, where difficult cases can be evaluated, diagnosed, and treatment recommended.

**9. AMERICAN HEART ASSOCIATION**

*Grant of \$32,000.00.*

The Michigan Heart Association is an affiliate of the American Heart Association, a national organization concerned with the fight upon heart disease through research and education. One-half of this sum is specifically committed to research in diseases of the heart and blood vessels. The other half is used for the Association's national educational campaigns.

# MICHIGAN HEART ASSOCIATION

## 10. EDUCATIONAL PROJECTS

A sum of \$10,000.00 has been set aside for the lay and professional education efforts of the Michigan Heart Association. This educational program will feature lay and factory education and publicity through speakers' bureaus, radio, exhibits for fairs and factories, pamphlets, etc. This is in the course of preparation.

### MEMBERSHIP DUES

Annual (Voting) Membership plus subscription to "Modern Concepts of Cardiovascular Disease".....\$ 5.00  
 Annual (Voting) Membership plus subscription to "Modern Concepts of Cardiovascular Disease" and "Circulation" (the official organ of the American Heart Association).....\$14.50

\*NOTE: Membership in the Michigan Heart Association automatically includes membership in the American Heart Association.

## ANNUAL HEART DAY

Saturday, March 11, 1950

Book-Cadillac Hotel—Crystal Ballroom  
 PAUL BARKER, M.D., *Chairman*

*Morning Session—9:00 a.m.*

Address of Welcome—

WARREN B. COOKSEY, M.D.

President, Michigan Heart Association

"Hypertension"—

IRVINE H. PAGE, M.D., Cleveland, Ohio

"Arteriosclerosis"—

LOUIS N. KATZ, M.D., Chicago, Illinois

"Rheumatic Fever"—

HUGH McCULLOCH, M.D., Chicago, Illinois

*Luncheon 12:00 Noon*

Luncheon Address—PAUL BARKER, M.D.

Incoming President, Michigan Heart Association

*Afternoon Session—1:30 p.m.*

First Annual Meeting of members of the Michigan

Heart Association

Election of Officers

## MICHIGAN HEART ASSOCIATION—OFFICERS AND COMMITTEES

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Mrs. Hugh Wilson.....	<i>Vice President</i> .....	Ann Arbor
Frank Van Schoick, M.D.....	<i>Vice President</i> .....	Jackson
Charles T. Fisher, Jr.....	<i>Treasurer</i> .....	Detroit
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# MICHIGAN STATE MEDICAL SOCIETY

## Eighty-fourth Annual Session

### DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES

#### MONDAY MORNING SESSION

September 19, 1949

The first meeting of the Eighty-fourth Annual Session of the Michigan State Medical Society, House of Delegates, held at the Pantlind Hotel, Grand Rapids, Michigan, on September 19-20, 1949, convened at ten-fifteen o'clock, J. S. DeTar, M.D., Speaker of the House, presiding.

#### I. Record of Attendance

Office	Officer	Meetings				
		1st	2nd	3rd	4th	5th
Speaker	J. S. DeTar	x	x	x	x	x
Vice Speaker	R. H. Baker	x	x	x	x	x
Secretary	L. Fernald Foster	x	x	x	x	x
Immediate Past President	P. L. Ledwidge	x	—	x	x	x
County		Delegate				
1. Allegan	L. F. Brown	x	x	—	x	x
2. Alpena-Alcona-Presque Isle	W. E. Nesbitt	Not Represented				
3. Barry	A. B. Gwinn	x	x	x	x	x
4. Bay-Arenac-Iosco	A. D. Allen	x	x	x	x	x
	W. S. Stinson	x	x	x	x	x
5. Berrien	D. W. Thorup	x	x	x	x	x
6. Branch	R. L. Wade	x	—	x	x	x
7. Calhoun	H. S. Hansen	x	x	x	—	x
	G. W. Slagle	x	x	x	—	x
8. Cass	S. L. Loupee	x	x	x	x	x
9. Chippewa-Mackinac	B. T. Montgomery	x	x	x	x	x
10. Clinton	G. E. Wahl	x	x	x	x	x
11. Delta-Schoolcraft	O. S. Hult	Not Represented				
12. Dickinson-Iron	D. R. Smith	x	x	x	x	x
13. Eaton	G. C. Stucky	x	x	x	x	x
14. Genesee	F. W. Baske	x	x	x	x	x
	C. W. Colwell	x	x	x	x	x
	J. E. Livesay	x	x	x	x	x
	C. K. Stroup	x	x	x	x	x
15. Gogebic	H. A. Pinkerton	Not Represented				
16. Grand Traverse-Leelanau-Benzie	D. G. Pike	x	x	x	x	x
17. Gratiot-Isabella-Clare	M. G. Becker	x	x	x	x	x
18. Hillsdale	L. W. Day	x	x	x	x	x
19. Houghton-Baraga-Keeweenaw	T. P. Wickliffe	x	x	x	x	x
20. Huron	C. W. Oakes	x	x	x	x	x
21. Ingham	R. S. Breakey	x	x	x	x	x
	L. G. Christian	x	x	x	x	x
	H. W. Wiley	x	x	x	x	x
22. Ionia-Montcalm	W. L. Bird	x	x	x	x	x
23. Jackson	C. S. Clarke	x	—	x	x	x
	J. D. Van Schoick	x	—	x	x	x
24. Kalamazoo	R. J. Armstrong	x	x	x	x	x
	W. A. Scott	x	x	x	x	x
	R. W. Shook	x	x	x	x	x
25. Kent	L. C. Carpenter	x	x	x	x	x
	G. W. DeBoer	x	x	x	x	x
	W. B. Mitchell	x	x	x	—	x
	S. L. Moleski	x	x	x	x	x
	Andrew Van Solkema	x	x	x	x	x
	A. V. Wenger	x	x	x	x	x
26. Lapeer	D. J. O'Brien	x	x	x	—	x
27. Lenawee	R. E. Dustin	x	x	x	x	x
28. Livingston	H. C. Hill	x	x	x	x	x
29. Luce	F. R. Koss	Not Represented				
30. Macomb	D. B. Wiley	x	x	x	x	x
31. Manistee	E. B. Miller	x	x	x	x	x
32. Marquette-Alger	N. J. McCann	x	x	x	x	x
33. Mason	E. B. Boldyreff	x	x	x	x	x

34. Mecosta-Osceola-Lake	T. P. Treynor	x	x	x	x	x
35. Menominee	J. R. Heidenreich	x	x	x	x	x
36. Midland	R. S. Ballmer	—	—	x	x	x
37. Monroe	T. A. McDonald	x	x	x	—	—
38. Muskegon	T. J. Kane	x	x	x	x	x
	R. D. Risk	x	x	x	x	x
39. Newaygo	B. L. Masters	x	x	x	x	x
40. North Central Counties	C. G. Clippert	x	x	x	—	x
41. Northern Michigan	J. R. Rodger	x	x	x	x	x
42. Oakland	H. A. Furlong	x	—	x	x	x
	C. R. Gately	x	x	x	—	x
	J. M. Markley	x	x	x	x	x
43. Oceana	W. H. Heard	Not Represented				
44. Ontonagon	W. F. Strong	x	x	x	—	x
45. Ottawa	D. C. Bloemendaal	x	x	x	x	x
46. Saginaw	H. O. Helmkamp	x	x	x	x	x
	H. M. Bishop	—	—	—	—	—
47. Sanilac	R. K. Hart	x	—	x	x	—
48. Shiawassee	C. L. Weston	x	x	x	x	x
49. St. Clair	W. H. Boughner	x	x	x	x	x
50. St. Joseph	R. A. Springer	x	x	x	x	x
51. Tuscola	L. L. Savage	x	x	x	x	x
52. Van Buren	W. R. Young	x	x	x	x	x
53. Washtenaw	P. S. Barker	x	x	x	x	x
	O. K. Engelke	x	x	x	x	—
	B. M. Harris	x	x	x	x	—
	H. H. Riecker	x	x	x	x	—
	R. W. Teed	x	x	x	x	x
54. Wayne	W. W. Babcock	x	x	—	x	x
	L. J. Bailey	x	x	x	x	x
	C. J. Barone	x	x	x	x	x
	W. D. Barrett	x	x	x	x	x
	D. C. Beaver	x	x	x	x	x
	E. G. Bovill	x	x	x	x	x
	W. L. Brosius	x	x	x	x	x
	C. L. Candler	x	x	x	x	x
	J. E. Croushore	x	x	x	x	x
	M. A. Darling	x	x	x	x	x
	H. F. Dibble	x	x	x	x	x
	Douglas Donald	x	x	x	x	—
	L. S. Fallis	x	x	x	x	—
	H. B. Fenech	x	x	x	x	x
	E. H. Fenton	x	x	—	x	x
	R. F. Fenton	x	x	x	x	x
	C. K. Hasley	x	x	x	x	x
	L. T. Henderson	x	x	x	x	x
	L. W. Hull	x	x	x	x	x
	R. A. Johnson	x	x	x	x	x
	J. A. Kasper	x	x	x	x	—
	D. H. Kaump	x	x	x	x	—
	E. D. King	x	x	x	x	x
	E. G. Krieg	x	x	x	x	x
	H. J. Kullman	x	—	x	x	x
	E. H. Lauppe	x	x	x	x	x
	J. J. Lightbody	x	x	x	x	x
	J. E. Lofstrom	x	x	x	x	x
	G. T. McKean	x	x	x	x	x
	L. J. Morand	x	—	x	x	x
	H. L. Morris	x	x	x	x	—
	R. L. Novy	x	x	x	x	x
	G. C. Penberthy	x	x	x	x	x
	R. H. Pino	x	x	x	x	—
	W. S. Reveno	x	x	x	x	x
	E. D. Spalding	x	x	x	x	x
	E. C. Texter	x	x	x	x	x
	R. V. Walker	x	x	x	x	x
	Arch Walls	x	x	x	x	x
	F. A. Weiser	x	x	x	x	x
	Joseph A. Witter	x	x	—	x	x
55. Wexford-Missaukee	M. R. Murphy	x	—	x	x	x

THE SPEAKER: Gentlemen, since last we met the House of Delegates of the Michigan State Medical Society suffered the loss of several of its most honored members. These are: Dr. Stanley W. Insley, Wayne; Dr. Bruce H. Douglas, Wayne; Dr. Thomas K. Gruber, Wayne, a delegate to the American Medical Association; Dr. T. E. DeGurse, Councilor of the 7th District; Dr. T. Y. Ho, Clinton; Dr. George Waters, St. Clair; and Dr. E. R. Witwer, Wayne.

Shall we rise and observe a moment of silence in memory of these seven men?

P. E. SUTTON, M.D. (Oakland): Mr. Speaker, I move that we instruct the Secretary to write an expression of great loss and sympathy from this House of Delegates, and that that testimonial be spread on the minutes of this meeting and a copy be sent to the widows or survivors of these men, Dr. Insley, Dr. Douglas, Dr. Gruber, Dr. Ho, Dr. Waters, Dr. DeGurse and Dr. Witwer.

(The motion was severally seconded, was put to a vote, and was carried.)

VICE CHAIRMAN BAKER: Members of the House, it is now my pleasure to introduce to you the Speaker of the House, Dr. J. S. DeTar, who will give his Speaker's Address. Dr. DeTar. (Applause)

## II. Speaker's Address

By J. S. DeTar, M.D., Milan, Michigan

In the National and State Educational Campaigns to educate the American people on current medico-socio-economic problems, much attention has been given to the rapid growth of *voluntary sickness and hospital insurance plans*, to the *success of the present free enterprise system* as reflected in longevity, low mortality rates, modern control of contagion, and other factors indicating that we have in America the *highest quality of medical care in the world today*. And much space has been devoted to indictments of the proposed government medical care system on the grounds of political infiltration, high cost, low quality of sickness care, bureaucratic control, and the fact that federal medicine represents a long step toward complete Socialism.

With the recent publishing of the Hoover Commission Reports, however, we have been given the materials for a different method of attack which to my mind has not been sufficiently exploited. And because the members of the House of Delegates are called upon throughout the State to *lead* in the current struggle to keep American medicine free, I am going to ask your indulgence for a few minutes for consideration of just two points, one concerning the Senate Bill (No. 1679), which would provide government medical care, and the other concerning the Hoover Report, which throws much light on the subject. I strongly believe that we, the delegates, have a personal responsibility to the members of the profession and to the public to provide logical analysis and interpretation in these matters.

The recommendations of the Hoover Commission have been highly respected in Congress. When the President tried to include education and medical care in a Department of Welfare *contrary* to the Commission recommendations, the Senate threw out his reorganization plan. Then, in contrast, when the President sent six more reorganization plans to the Senate *in conformity* with the Commission recommendations, all six were ratified in a single day.

Therefore, in any consideration of the problem of whether sickness care shall or shall not be assumed by the Federal Government, the findings and the advice of this Commission in its soul-searching analysis of the ills in the administration of our National Government, must be given a high priority.

The two points which I believe should be emphasized during the next few months are these:

1. That the President's plan for sickness care, Bill S. 1679,<sup>1</sup> does, *openly and definitely*, establish *Federal control* of all sickness care; and, call it what you will, that it is, strictly—Government Medicine, Federal Medicine, Socialized Medicine, despite all claims to the contrary.

2. That the Hoover Commission Report<sup>9</sup> provides overwhelming proof that the Federal Government is manifestly *unqualified* to assume the responsibility of sickness care on behalf of the people.

Simple, isn't it? And yet, if these two points can be proved to the American people to their satisfaction, Government medical care will be tossed from the ring in the first round of the 1950 battle. I believe the two points merit a few minutes of our time.

You are familiar with S. 1679. It consists of 163 pages. Over a third of it is devoted to compulsory sickness insurance, more than sixty pages. Of these sixty pages, twenty-four are devoted to a description of *decentralization*—of the administration of the scheme: local area committees, local professional committees, state administration, et cetera.

However, careful reading of these pages provides conclusive evidence that *local and state control are not even contemplated*—that the claim of decentralization is simply a sham—a blind behind which the socializers are hiding to lure their game into better shooting position.

All through the twenty-four-page section on "decentralization," one finds sentences like this:

"In the event of its disapproval of any (State) plan, the Board shall notify the State of its disapproval."<sup>5</sup> Note that the bureau in Washington may disapprove. Or this: "If within sixty days . . . the State has not submitted an approvable plan, the Board shall undertake the administration (of the plan). . . ."<sup>5</sup> Note that the bureau may here bypass the Governor and the State. Of this: "The Board shall have and discharge all authority and duties. . . ."<sup>6</sup> And this: "The Board shall make all regulations,"<sup>7</sup> and "Personnel of the Board shall be appointed by the Administrator."<sup>8</sup>

Note here that the Board has all authority, makes all regulations, and may set up its own system of sickness care in any state regardless of the wishes of the people in that state. I ask you: is this decentralized administration, or is it strict Federal Government control?

Next we find an elaborate organization of advisors presumably to keep the system as clean as possible. Now note how this Advisory Council is formed: "There is hereby established a National Advisory Medical Policy Council . . . to consist of the Chairman of the Board . . . and sixteen members appointed by the Federal Security Administrator. . . ."

Note here, as throughout the entire scheme, that *there is no state representation*. This Advisory Council is appointed by the Administrator in Washington. It is the familiar pattern of government by bureau which became so familiar during the war.

There is of course provided a method for citizens to register complaints before tribunals to be set up locally. Such complaints—in writing—will be heard before these bodies within the framework of this national bureau according to rules laid down by the bureau and its Administrator in Washington.

The point is a vital one: We have approval or disapproval, we have authority to make regulations, we have tribunals to hear complaints, all controlled by a Federal Bureau. The pattern is becoming a familiar one—not only in the field of medical care but in the fields of agriculture, education, housing, and insurance. This is a system of strict, centralized, bureaucratic control with no true decentralization.

All through the bill we find these phrases: "in the discretion of the Administrator,"<sup>8</sup> "the Administrator shall determine the sums . . . for . . . the States,"<sup>2</sup> "the Administrator shall approve . . ."<sup>3</sup> "the Administrator shall prescribe such regulations."<sup>4</sup>

There is no uncertainty about this phraseology. This scheme allocates all power, all authority, and all decision, with all controls and with the whip-hand of fund allocation to back it up, to a Federal bureau in Washington—just as is the case with socialized medicine in England today.

This point, the growing power of centralized government, is the occasion for serious thought by Joe Doakes and his wife. They are beginning to wonder just how far Federal taxation can continue to grow and still leave them enough to live on. And they are beginning to see that this proposed centralized control, this extension of the power of the Federal Government over the lives of the people has a strange similarity to the system of socialism in England. So they naturally ask, "If this scheme is actually Federal Government sickness care, just what



kind of a job can we expect the Federal Government to do for us when and if it actually takes over?"

This brings us to Point 2—the findings of the Hoover Commission,<sup>9</sup> because therein we shall find the answer.

*The Second Point—Gross Inefficiency:* The Commission Report provides overwhelming evidence that the Federal Government is manifestly unqualified to assume the responsibility of sickness care on behalf of the people. The Report discloses excessive cost, gross inefficiency, shocking waste, amazing overlapping and duplication of services, not only in medical and hospital and insurance fields, but in all fields investigated. And bear in mind that these disclosures are not the imaginings of a group of reactionaries bent on self-benefit; they are the findings of twenty-four impartial task forces of 300 leading citizens serving their Government.

*Federal Employees:* The Report tells us that it takes four times as many people to run the Federal Government as it did twenty years ago, and it explains *why* it takes so many:<sup>11</sup>

"Too many supervisors believe that action to reduce the number of persons in their units will result in their salaries being reduced, while increases . . . will lead to their salaries being increased. This makes supervisors believe they will be rewarded for inefficiency, and encourages 'empire building.'"<sup>12</sup>

And the sad fact is that there are over 1800 of such bureaus in Washington vying with each other for increasing portions of the taxpayer's paycheck.

*Low Estimates—High Costs to the Taxpayer:* The Congressional Record is filled with projects presented to Congress with low original estimates and high final costs. One project was estimated to cost \$44 million, and actually cost \$131.5 million. Another was estimated at \$6.5 million, and finally cost a whopping \$93.5 million.<sup>17</sup> Amazing, isn't it? And yet compulsory sickness insurance is of the same cloth. As in England, no one has been able to put a top figure on the probable cost, because no one knows.

*The Government Record in Business—The Post Office:* Compulsory sickness insurance would constitute big business—billions of dollars every year. How does the Government run its other big businesses? The Report tells us about the Post Office business in these words: "Obsolete, . . . over-centralized, . . . outmoded laws . . . freezes progress . . . stifles proper administration . . . takes months to find records<sup>15</sup> . . . losing money up to \$500 million this year . . . 22,000 employees politically appointed in spite of laws to the contrary."<sup>16</sup>

And there is *no* evidence to indicate that the same Federal Government would do any better job in the care of the sick. Let's check the record in this field, since that is exactly what Joe Doakes and his wife are wondering about.

*Sickness Care and Hospitals:* The story is much the same here. The investigators found and reported "forty-four Federal agencies conducting medical or health activities without central supervision, and with no clear understanding as to who should be treated."<sup>18</sup> They report:

"The enormous and expanding Federal medical activities are devoid of any central plan."<sup>18</sup> They add: "The Government is moving into uncalculated obligations without an understanding of their ultimate costs."<sup>18</sup>

Pretty strong words, aren't they? In the hospital field, they found gross waste, and more waste planned for the future. They found that the Veterans' Administration was planning to build hospitals with more than 50,000 additional beds when 30 per cent to 40 per cent of their beds were vacant.<sup>20</sup> And the Veterans Administration is

only one of fourteen Federal agencies building and operating hospitals. They found that dozens of Federal hospitals could be closed. They conclude that "Federal agencies . . . compete with each other,"<sup>19</sup> and that using existing community hospitals would be more economical.<sup>21</sup> They found that Federal hospitals cost from \$20,000 to \$51,000 compared with \$16,000 for voluntary hospitals.<sup>19</sup>

They discovered that in one small area there were eleven major Federal hospitals with so many full time physicians that there were only nine patients per doctor, and still a single agency planned to spend \$100 million in this very area for more hospitals in spite of a vacancy rate which would have permitted actual closing of several of the eleven institutions without reducing service.

*Much More Evidence:* Are you shocked? You should be. And yet there are volumes of similar evidence. And still this scheme would turn over our sickness care to this type of administration. The report says: "Confusion in the Government agencies bewilders the citizen in his contacts with the Government,"<sup>10</sup> with . . . "deficiencies in training, overlapping functions, excessive details;" it cites an example of how long it took one supervisor to discharge a completely incompetent stenographer—seventeen months.<sup>13</sup>

It cites a \$30,000,000 error in the budget caused by carelessness.<sup>14</sup> It tells of two bureaus each spending \$250,000 to conduct an irrigation survey, exactly duplicating the work and the cost, with the taxpayer footing the bill. There is a long report on Federal operation of the insurance business, and it can be summarized in one sentence. "It takes four times as many employees to handle Veterans' insurance policies as the Metropolitan Insurance Company employs for the same number of policies."<sup>22</sup>

One could go on and on. Waste and inefficiency are apparently inherent in Federal government. The Hoover Commission has ferreted out the defects, and has pointed the way to their cure, tempered with the warning that some defects are so serious that no solution can be foreseen at present. Despite the conscientious work of thousands of Government workers, one is forced to summarize the description of government operation in most fields examined by the Hoover Commission in just two words: gross inefficiency. I therefore repeat point number two:

The Hoover Commission report provides overwhelming proof that the Federal Government is manifestly unqualified to assume the responsibility of sickness care on behalf of the people. The evidence is strong; it is incontrovertible. It is indisputable.

I have a firm conviction that if the American taxpayer can have clearly demonstrated to him these two points: (1) that the program of Mr. Truman and Mr. Ewing is actually Federal Government, Socialized medicine, and (2) the Federal Government is unfit to assume this responsibility of sickness care for the people, the result will be quick and it will be sure. The American people will have none of it. The speed with which this end is attained will depend on the physicians of America, of which we in this room represent a sizable segment.

## References

1. Bill S. 1679, 81st Congress, First Session.
2. *Ibid.*, page 94.
3. *Ibid.*, page 97.
4. *Ibid.*, page 101.
5. *Ibid.*, page 134.
6. *Ibid.*, page 136.
7. *Ibid.*, page 138.
8. *Ibid.*, page 139.
9. Hoover Commission Report on Organization of the Executive Branch of the Government. New York: McGraw-Hill Book Co., 1949.
10. *Ibid.*, pages 21-24.
11. *Ibid.*, page 109.
12. *Ibid.*, page 110.
13. *Ibid.*, page 127.
14. *Ibid.*, page 191.
15. *Ibid.*, page 221.
16. *Ibid.*, page 225.
17. *Ibid.*, page 266.



18. Ibid, page 339.
19. Ibid, page 340.
20. Ibid, page 341.
21. Ibid, page 342.
22. Ibid, page 364.
23. Ibid, page 366.

CHAIRMAN BAKER: The report of the Speaker was referred to the Reference Committee on Officers' Reports.

(President Sladek read his address.) (Applause)

### III. The President's Address

By E. F. Sladek, M.D., Traverse City

You have just heard a most illuminating and stimulating address by our Speaker. It proves but one thing; we doctors are now in politics with all that we have.

The success of our CAP campaign is an example of what we can do. Just because we have postponed national legislative action on socialized medicine is no reason to assume that the danger is past. We must continue our efforts at an ever increasing tempo until the social reformers in Washington fully and finally realize that their cause is lost, and that the people of this country do not want socialized medicine and the socialized welfare state. Just one week ago an election was held in a congressional district in Pennsylvania. The sole issue between the two candidates was socialized medicine and the Truman welfare state. The doctors, dentists, pharmacists, and nurses actively entered the campaign and won a decisive victory. This shows what organized effort can do.

Consideration of the work of this past year suggests that our doctors have been giving a major part of their attention to distant problems in the political field. This was occasioned by the existing national emergency. It is evident that more and more emphasis must be placed on local community and state health legislation in addition to that at the national level. We must strengthen our grass-root politics by an all out effort to know our state legislative representatives. All legislative work cannot be done in Lansing.

Our specific fight against socialized medicine is not enough. We, as a medical profession, must broaden our horizon, join with other organizations in an effort to stymie the new political and social philosophies which are attempting to develop a welfare state of which socialized medicine is only one segment.

During this past year the ramifications of the activities of the Michigan State Medical Society have been like a spiderweb of energy. The Report of the Council very briefly summarizes these and yet it requires nineteen pages in your handbook. In addition, Chairman Otto Beck will give you a supplemental report covering the last three months of the year. These two reports prove that our Michigan doctors are giving some of their time toward building up their profession. To review these would be a duplication of effort and would only take up your time.

To me, it is gratifying to note that our doctors are becoming interested in civic organizations. It is one of our duties that we do so. The layman looks up to a doctor and it is probable that his opinion carries more weight in discussion groups. An outstanding example was the organization of the Michigan Heart Association, a major portion of the Board of Directors being doctors. I can assure you that these doctors contributed much in the immediate and future planning of activities, with much respect and appreciation by the lay members. By medical stimulation the Michigan Health Council was reorganized into an active body. The remarkable success of the Rural Health Conferences with the resulting good will and respect for the medical profession by the other groups involved was well worth the effort put forth by the Michigan State Medical Society. Medical interest, co-operation, and participation in all civic groups is an objective towards which we should aim. Public good can only come from well planned projects based on sound

knowledge. Projects involving health must have medical advice and supervision. We must seek further opportunities to offer our services.

The Michigan State Medical Society was established with its main objective being the improvement of the health of the people of the State of Michigan. The best public relations we have is to practice good medicine. We must become familiar with the newest therapeutic and surgical techniques and keep up to date with our swiftly advancing science of medicine. This Annual Session, during the next three days, is an outstanding opportunity to do this. Michigan leads the country and the world in offering continuation postgraduate courses to its physicians.

Besides practicing good medicine we do give consideration to the social aspects of medical practice. Many of our patients cannot afford the costs of modern medical and hospital care. Michigan's voluntary prepayment surgical and hospital plans contribute much towards this problem but only partly solve it. They should be expanded in scope, both as to numbers of subscribers and medical coverage. Ideally each one of us should give consideration to a patient's ability to pay. If we do, we most certainly will increase public respect for our profession.

Our prepayment medical care plan is the only plan of medical service in which we have the responsibility of development. Any competitive plan of government or non-medical agencies will be developed without the voice of the medical profession. If medicine has no voice in the formation of these plans, most certainly it will have no voice in their administration nor in the benefits they allow. It is time that we get down to a basic understanding of the problem. Full co-operation, full and enthusiastic support, full participation—that is the only answer to the proposed Washington legislation. It is your individual responsibility.

There is one very recent Council activity on which I wish to comment: the appointment of a joint committee from both the Michigan State Medical Society and the State Board of Registration in Medicine to develop a modernization of the Medical Practice Act. This will constitute a long range study and involve a series of legislative proposals. These will be important and will need the energetic support of everyone of us. I know that eventually all of our problems relating to legalization of medical practice will be solved.

THE SPEAKER: The President's address was referred to the Reference Committee on Officers' Reports.

### IV. The President-Elect's Address

By W. E. Barstow, M.D., St. Louis

Most of the problems to be considered today have been ably discussed by preceding speakers. But certain matters are worth emphasis, even at the expense of repeating that which has already been stated.

Overshadowing much of the Society's local program is the urgent need to continue the CAP program in an extended and intensified form during the coming year. There is sure to be a much harder fight during the next session of Congress than during the last, as the strategists of the present Administration attempt to salvage the major elements of their campaign promises of 1948. We must continue our letters, telegrams, and personal contacts to Washington in varied form, and see that our patients, and friends do the same. This fight against socialized medicine may require the continuing effort of many years, but it will require an intensified effort this coming year. But if we fail, we may be sure that not only socialized medicine, but the cornerstone of the "Welfare State" will be ours to live with. No effort can be too great to avoid exchanging our birthrights for such a mess of pottage. The answer is we must not fail. We shall not fail. We will win this fight.



# PROCEEDINGS EIGHTY-FOURTH ANNUAL SESSION

A second long range program is the question of impractices. This problem has been much discussed, but will bear still more discussion. And much more action. It is the one factor which, more than any other, is promoting political medicine. Commercialization, refusing to make night calls, or otherwise subverting medical service of the people to selfish interests, cannot but create a public receptive to argument for state medicine.

One of the most important of the Society's needs is adequate housing for the executive offices. The tremendous increase in number of worthwhile projects undertaken by the Society in the last few years, and the resultant increase in personnel employed, has created a demand for vastly larger working and record space. At the present time it appears impossible to rent the required space in Lansing. The only solution, apparently, is to buy or build such housing. Last year the House of Delegates authorized the council to rent larger quarters. Every effort has been made to find such quarters, but to no avail. Many state societies have felt that part, or even all of their reserves, furnish them a greater return when invested in a home building than when banked at 1 per cent. That is my feeling also. I urge you to give serious consideration to such action during this session.

A second state project for your consideration is a broadening of the base of our public relation activities. Many local societies are actively courting newspaper co-operation by staging dinners for newspaper editors and news editors of the various radio stations, and organizing co-operating committees to solve current public relations problems. It is probable that such public relations spadework could profitably be extended to every County Society. The medical profession can no longer wait for news agencies to ferret out its policies and programs. We must aggressively compete with other agencies, including those of our national government, for the privilege of giving to the public the truth about medicine.

You will note that many of the projects suggested for your consideration have been of national import, and have concerned the general public. More and more, in the present day, the medical profession is being forced into a position which it does not seek and for which it is not properly qualified, namely, the responsibility of explaining medical necessities to the American public. We are being placed in this position because false and untruthful explanations of the present situation and methods of health care are being made by those who would change the basic principles of medical practice. So we must give the people the *truth*. We have a notable advantage in this effort if we wish to make use of it. That advantage is, that while we may differ in small details we do present a united front on every major issue—a united front based on truths that have become known to us from long years of experience. It is these truths which if made self evident to the people will keep us and our patients—the people of Michigan—free.

THE SPEAKER: The address of the President-elect was referred to the Reference Committee on Officers' Reports.

## V. Annual Reports of the Council

L. FERNALD FOSTER, M.D., secretary, presented a résumé of the Annual Report of The Council as printed in the Delegates Handbook.

O. O. Beck, M.D., Chairman of The Council, read the supplemental report of The Council.

## SUPPLEMENTAL REPORT OF THE COUNCIL

1. *Membership*—As of September 10, 1949, the membership of the Michigan State Medical Society totalled 4,854 including 284 Military and Special Members who are relieved from paying dues and assessments.

2. *Finances*—The Constitution of the Michigan State Medical Society charges The Council with administration of the funds of the Society, and the Treasurer with responsibility for safekeeping of the Society's invested funds.

Following the mandate of the Constitution, The Council has caused an "annual audit to be made of the funds of the Society by a certified public accountant." The complete report of Ernst & Ernst, for the year 1948, was published in the March, 1949, issue of THE JOURNAL of the Michigan State Medical Society, beginning at Page 380. On Page 379 of the same number of THE JOURNAL is a copy of the MSMS budgets for the year 1949. The audit of Ernst & Ernst is and always has been open for inspection by any member of the Michigan State Medical Society who may call at the Executive Offices, 2020 Olds Tower, Lansing 8.

The report of our auditor for the first eight months of this year (that is, to September 1, 1949) of income and expense is as follows:

	On Hand	Income to	Expenses to	Balance on Hand
ACCOUNT:	1-1-49	9-1-49	9-1-49	9-1-49
General Fund .....	\$ 71,963.49	\$ 52,930.78	\$ 52,835.98	\$ 72,058.29
Annual Session .....	—0—	20,225.00	4,822.78	15,402.22
Postgraduate Institute..	—0—	8,380.00	9,678.13	1,298.13
				Loss
The Journal .....	—0—	41,465.48	34,995.95	6,469.53
Public Education .....	—0—	113,318.75	61,200.39	52,118.36
Public Ed. Reserve.....	100,000.00	—0—	51,465.59	48,534.41
Rheumatic Fever .....	10,084.28	32,515.72	14,393.45	28,206.55
TOTALS .....	\$182,047.77	\$268,835.73	\$229,392.27	\$221,491.23

### Estimated Over-all Budget for 1950

<i>Estimated Income:</i>	
1950 Dues (4,300 members at \$37.00) .....	\$159,100.00
(Allocated \$10.50 to General Fund) .....	45,150.00
(Allocated \$1.50 to The Journal) ..	6,450.00
(Allocated \$25.00 to Public Education) .....	107,500.00
Advertising Sales, Reprints & Cuts .....	57,600.00
Annual Session .....	13,280.00
Postgraduate Clinical Institute.....	8,000.00
Rheumatic Fever Program.....	15,000.00
Interest and Miscellaneous Income .....	800.00

TOTAL INCOME .....\$253,780.00

### *Estimated Expenses:*

Administrative and General Expense .....	\$ 34,480.00
Society Expense .....	23,000.00
Committee Expense .....	13,500.00
Public Education Expense.....	72,800.00
Journal Expense .....	55,750.00
Annual Session Expense.....	13,280.00
Postgraduate Clinical Institute Expense .....	8,000.00
Rheumatic Fever Expense.....	28,900.00
Contingencies .....	4,070.00

TOTAL EXPENSES .....\$253,780.00

More detailed financial reports showing "Income and Accounts Receivable" and "Expenses" from January 1, 1949 to September 1, 1949, and also on the "Bond Account" as reported by the Treasurer to The Council at its meeting of July 9, 1949, have been presented today (in mimeographed form) to all members of the House of Delegates.

3. *Public Education Account*—This fund, accumulated from the special \$25 assessment levied by the 1948 MSMS House of Delegates, has been used exclusively for public relations and public education purposes, as indicated in the following accounting for the first eight months of 1949:

### PUBLIC EDUCATION ACCOUNT

<i>Income:</i>	
Assessment of Members.....	\$113,068.75
Assessment of Members Prior Years .....	250.00

Total Income .....\$113,318.75

### *Expenses:*

Clipping Service .....	\$ 170.29
Committee Meeting Expense.....	435.66
Equipment & Repairs.....	314.91
Postage .....	918.46
Printing, Stationery & Supplies.....	1,066.76
Office, Rent and Light.....	347.04
Salaries .....	11,387.07
Telephone & Telegraph.....	1,574.52



# PROCEEDINGS EIGHTY-FOURTH ANNUAL SESSION

Travel Expense .....	1,437.49
Miscellaneous General Expense.....	877.46
Cinema .....	15,101.41
Newspaper Advertising .....	7,493.10
Publications & Pamphlets .....	336.69
Radio—"Tell Me, Doctor" programs .....	16,453.22
Schools—Sex Education and Libraries .....	2.50
Annual County Secretaries and Public Relations Conference.....	2,748.85
Second Rural Health Conference.....	521.71
Third Rural Health Conference.....	13.25

Total Expenses .....	\$ 61,200.39
Balance on Hand September 1, 1949.....	\$ 52,118.36

*Public Education Reserve Account*—Last January, the reserve for contingencies (\$100,000) was placed at the disposal of the Special Committee on Education (composed of L. W. Hull, M.D., Detroit, Chairman, O. O. Beck, M.D., Birmingham, L. Fernald Foster, M.D., Bay City, C. E. Umphrey, M.D., Detroit) as The Council realized the imminent threat of political medicine—the emergency for which we had been building a reserve fund—had arisen. The Special Committee on Education reports the following expenditures in the Michigan CAP campaign which has successfully organized and unified the medical profession of this state in its open war against statism and collectivism—best exemplified by the successful fight last month against President Truman's proposed Reorganization Plan No. 1; the avalanche of concentrated activity on the part of our Michigan doctors more than justified the labor and expense of setting up the CAP program.

## PUBLIC EDUCATION RESERVE ACCOUNT

On Hand January 1, 1949.....	\$100,000.00
Expenses:	
Salaries .....	\$ 22,928.45
Printing, Stationery & Supplies.....	9,119.02
Postage .....	420.26
Telephone & Telegraph .....	706.93
Travel .....	8,376.30
Office Equipment .....	218.02
Publications & Pamphlets .....	7,452.91
Meeting Expenses:	
Special Committee on Education .....	451.98
Field Secretaries .....	805.82
Other Meetings .....	947.55
Program (Radio, Cinema, News- papers) .....	25.00
Miscellaneous Expense .....	13.35

Total Expenses .....	51,465.59
Balance on Hand September 1, 1949.....	\$ 48,534.41

## 4. Estimated Public Relations Expenditures Budget for 1950:

Estimated Expenditures:	
Clipping Service .....	\$ 300.00
Committee Meeting Expense.....	1,200.00
Equipment & Repairs .....	200.00
Postage .....	1,000.00
Printing, Stationery & Supplies.....	1,000.00
Office Rent and Light .....	1,800.00
Salaries .....	20,000.00
Telephone & Telegraph .....	1,200.00
Travel Expense .....	2,200.00
Cinema .....	5,000.00
Display Advertising .....	200.00
Newspaper Advertising .....	2,500.00
Publications & Pamphlets .....	5,000.00
Radio—"Tell Me, Doctor" Programs .....	19,000.00
Schools—Sex Education and Libraries .....	200.00
National Meeting Expense.....	500.00
Annual County Secretaries and Public Relations Conference.....	3,000.00
Miscellaneous General Expense.....	1,000.00
Michigan Health Council.....	7,500.00

Total Expenses .....	\$ 72,800.00
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## Estimated Public Relations Reserve Expenditures Budget for 1950:

Estimated Expenditures:	
Salaries .....	\$ 25,480.00
Printing, Stationery & Supplies.....	1,000.00
Postage .....	1,000.00
Telephone & Telegraph .....	1,000.00
Travel .....	10,000.00

Office Equipment .....	100.00
Publications & Pamphlets .....	5,000.00
Meeting Expenses:	
Special Committee on Education .....	500.00
County Society and other meet- ings .....	1,000.00
Other Activities .....	1,000.00
Total Expenses .....	\$ 46,080.00

## NOTE:

Out of the \$213,318.75 available this year, approximately \$145,000 will have been spent by December 31, 1949. The remaining \$68,318.75, combined with an expected \$107,500.00 (this dependent upon another annual \$25 assessment) would give an amount of \$175,818.75 for 1950.

Totaling the expense for Public Relations of \$72,800 and for the CAP program of \$46,080 under the above budget for 1950, the proposed expenditures would reach \$118,880 with \$56,938.75 still in reserve on December 31, 1950.

5. *Medical Public Relations*—Public thinking comes from (1) a deed—good or bad; and (2) the interpretation of the deed. Our MSMS Public Relations program attempts day after day to show dramatically that medicine is doing good deeds and to give the proper and repeated interpretations of those deeds; i.e., that medicine is solving its problems and that it is utilizing all means to improve the distribution of quality medical care to the people. But no public relations program and no amount of money, no matter how vast, can offset or even mitigate the evil doing, either by commission or omission, of a few members of the medical profession.

The Council again urges that every county medical society appoint a County Mediation Committee to co-operate with the Michigan State Medical Society Mediation Committee in the prompt adjudication of breaches of medical professional relations that continually plague our best efforts in public relations. The Council made this same plea one year ago but only nineteen County Medical Societies have reported to us the appointment of Mediation Committees.

6. *Michigan Medical Service*. An up-to-date report on this corporation, including finances, will be presented to you at the meeting of Michigan Medical Service membership tomorrow, September 20, at 2:00 p.m. in this room. All MSMS Delegates are members of the Michigan Medical Service Corporation, and are expected to attend this important meeting.

7. *Printing of House of Delegates Proceedings*. The publication in JMSMS of every word spoken during MSMS House of Delegates Sessions has become a dangerous practice so far as medical public relations are concerned. On occasion, the personal expressions and private sentiments of individual delegates have become embarrassing boomerangs to the entire medical profession. Therefore The Council feels that better public relations would be served if a résumé—containing in complete form all resolutions, motions, and actions of the House of Delegates—is ordered printed, conforming with the practice of the American Medical Association and other major state medical societies. *A recommendation on this subject follows.*

8. *Dispensing of Eye Glasses*. Last July, the County Societies Committee of The Council discussed the possibility of a need for a change in the 1948 ruling of the MSMS House of Delegates respecting eye glasses and their dispensing which ruling conflicts with the AMA resolution on rebates (Section 6, AMA Code of Ethics). *A recommendation on this subject follows.*

9. *Committee to Study Health Plans*. The Council respectfully reports the appointment of a Special Committee to carry on co-operation and investigation with representatives of farm, industry, labor, and small business



groups concerning health plans. The personnel of this Committee, which has held three meetings recently, is P. L. Ledwidge, M.D., Detroit, Chairman, A. S. Brunk, M.D., Detroit, L. Fernald Foster, M.D., Bay City, with O. O. Beck, M.D., Birmingham, Ex Officio as Chairman of The Council.

This Committee presented the following statement to The Council on September 18, 1949; after full and complete study The Council approved the statement and recommendation, as follows:

### Michigan Medical Service

"The medical profession is dedicated to service. It alone can offer a service contract for medical care. This it did through Michigan Medical Service in 1939 for a specified income group.

"It is the opinion of The Council that certain changes in the present Michigan Medical Service contracts are indicated—because

1. They are necessary to preserve the philosophy of a 'Service Plan.'

2. Changing economic conditions have altered income values.

3. More people should be provided complete coverage if Michigan Medical Service or the voluntary pre-payment system is to compete successfully with proposed compulsory plans of the Federal government and other plans in which organized medicine would have little or no voice.

"These changes have been indicated for some time by the economic and political factors inherent in our national life. If the philosophy upon which Michigan Medical Service was created in 1939 was sound then, it should be sound now. To keep it sound now the plan needs definite revisions so that it can continue to serve the same economic groups and provide a solution for the social and economic problems for which it was originally developed.

"THEREFORE—The Council recommends, that in keeping with this concept, The House of Delegates of the Michigan State Medical Society requests Michigan Medical Service to:

- (a) Increase the income limits to \$5,000.00.
- (b) Increase the schedule of fees paid physicians.
- (c) Provide that all hospital services of physicians, both Medical and Surgical, be included as benefits.
- (d) Continue all the present forms of contracts affecting the \$2,500.00 income limits."

*This Recommendation is repeated among the other Recommendations of The Council, at the end of this report.*

10. *More Space for Executive Offices.* Negotiations for the purchase of the small building in Lansing, described in the Annual Report of The Council (on Page 53 of Handbook for Delegates), are presently at a standstill. The Lansing Planning Commission was favorable to rezoning the property to permit its use by the Michigan State Medical Society, but the owner suddenly changed his mind on the price. If this building cannot be purchased within a reasonable time for the sum of money originally agreed upon, the Society will decide upon another site available to MSMS for a permanent home.

11. *Veterans Administration Hospital in Ann Arbor.* The newspapers recently carried a story that a Veterans Administration General Hospital in Ann Arbor would be built at a cost of over \$7 million dollars. This is at variance with the wishes of the MSMS House of Delegates expressed in its resolution unanimously adopted on September 20, 1948, which stated in part: "That to establish a Veterans Administration General Hospital near Ann Arbor at this time is not necessary and not in the best interests of the public."

12. *AMA Assessment.* Michigan is seventh among the fifty-three constituent societies of the American Medical Association in payment of the AMA Assessment. Eighty-two per cent of our members have co-operated and given wholehearted support to our parent organization. To the other eighteen per cent, we hope that The Council's recommendation No. 1 (to be found on page 56 of the Handbook for Delegates) will be read and followed.

### Recommendations

We respectfully invite to your attention the six recommendations in the original report of The Council printed in the Handbook on Pages 56-57. They read as follows:

The Council recommends:

1. That each and every member of the Michigan State Medical Society co-operate wholeheartedly and to the best of his ability, both by action and financially, to the National Education Campaign of the American Medical Association and that each member feel it an honor and a privilege to aid the AMA not only by payment of the small AMA assessment but by vigorously entering the AMA program of active and direct resistance against attempts to throw the practice of medicine into politics.

2. That the MSMS Legislative Committee be instructed to reintroduce into the 1951 Legislature a proposal similar to S.B. 292 of 1949, to permit the exemption of interns and residents from the provisions of licensing under the Michigan Medical Practice Act for a period of not over six years in order to authorize post-graduate hospital training beyond one year and to encourage more doctors of medicine to train and locate in this State; and that the Legislative Committee utilize all its efforts, well in advance of the 1951 Legislative Session, to insure that this proposal is well understood and is favorably received by the Michigan lawmakers and all other parties in interest.

3. That the House of Delegates specifically authorize The Council to purchase or build a building with suitable space and dignity, to house the Executive Offices of the MSMS, so that the critical situation of overcrowding in the present inadequate space is remedied.

4. That the Committee on Constitution and By-Laws of the House of Delegates be requested to give consideration to several necessary amendments to the 1948 revised Constitution and By-Laws, recently referred to The Committee by The Council.

5. That Wilfrid Haughey, M.D., of Battle Creek, longtime Councilor and former State Society Secretary, who is presently Editor of the Michigan State Medical Society Journal and official representative of the State Society to numerous ancillary health groups, be considered by the House of Delegates as recipient of an award, to be designated as "President for a Day"; this honor to be conferred on the occasion of Officers Night, September 21, 1949, during the Michigan State Medical Society Annual Session in Grand Rapids.

6. That the special assessment of \$25, be continued for the year 1950, in order to meet the need of additional funds for various purposes in the work of the Michigan State Medical Society.

The Council respectfully submits three additional recommendations:

7. That the House of Delegates requests Michigan Medical Service to:

- (a) Increase the income limits to \$5,000.00.
- (b) Increase the schedule of fees paid physicians.
- (c) Provide that all hospital services of physicians, both medical and surgical, be included as benefits.
- (d) Continue all the present forms of contracts affecting the \$2,500 income limits.

8. That the House of Delegates instruct the Publication Committee of The Council to publish only a résumé of the annual Proceedings of the House of Delegates, which shall include in complete form all resolutions, motions and actions of the House.



## PROCEEDINGS EIGHTY-FOURTH ANNUAL SESSION

9. That the House of Delegates give study to clarify the conflict between the American Medical Association interpretation and the 1948 MSMS House of Delegates resolution on the subject of dispensing of eye glasses.

Respectfully submitted,

O. O. BECK, M.D., *Chairman*  
 R. J. HUBBELL, M.D., *Vice Chairman*  
 C. E. UMPHREY, M.D.  
 P. A. RILEY, M.D.  
 WILFRID HAUGHEY, M.D.  
 J. D. MILLER, M.D.  
 R. C. POGHERT, M.D.  
 H. B. ZEMMER, M.D.  
 L. C. HARVIE, M.D.  
 E. A. OAKES, M.D.  
 F. H. DRUMMOND, M.D.  
 C. A. PAUKSTIS, M.D.  
 A. H. MILLER, M.D.  
 W. S. JONES, M.D.  
 D. W. MYERS, M.D.  
 E. A. OSIUS, M.D.  
 WILLIAM BROMME, M.D.  
 W. B. HARM, M.D.  
 J. S. DETAR, M.D.  
 E. F. SLADEK, M.D., *President*  
 W. E. BARSTOW, M.D., *President-Elect*  
 L. FERNALD FOSTER, M.D., *Secretary*  
 A. S. BRUNK, M.D., *Treasurer*  
 P. L. LEDWIDGE, M.D., *Immediate Past President*

THE SPEAKER: The supplemental report of The Council was referred to the Reference Committee on Reports of The Council, with the exception of all that part which dealt with Michigan Medical Service and the recommendations to Michigan Medical Service, which was referred to a combined committee, consisting of the Reference Committee on Reports of The Council and the Reference Committee on Medical Service and Prepayment Insurance. The Chairman of that Committee was designated as Dr. Palmer Sutton, who is Chairman of the former Committee.

### VI. Report of Delegates to AMA

The report of the Delegates to the American Medical Association, given by L. G. Christian, M.D., of Lansing, Chairman.

This report covers the interim session held at St. Louis and the annual session at Atlantic City. The interim session report was made to The Council and will not be read here unless you request it. The Council already has had it and has digested it. If anyone wants to know what happened in St. Louis I will be glad to read it. The main thing that did occur at St. Louis was the Michigan and California resolutions setting up the \$25 assessment for the American Medical Association, which put the American Medical Association in a position actually to combat the things that are going on in Washington.

The House of Delegates convened Monday, June 6. All Michigan delegates, including Dr. Ralph A. Johnson, alternate, were present at all meetings. Your delegates met on Sunday night previous, and also met with delegations of other states and sections. We had conferences with the President and representative members of the Board of Trustees to present Michigan's views on problems confronting the medical profession.

Following the roll call the Distinguished Service Award was given to Dr. Seale Harris of Birmingham, Alabama. We refer you to the June 18 issue of J.A.M.A. for biography. Addresses by the Speaker of the House and the President, outlining the policies of the American Medical Association, were well received.

The report of the Board of Trustees is too long and complicated to be analyzed here. For those who care to read it you may find it in full in the J.A.M.A. for June 18, 1949. In passing, however, we might say it covers the following:

1. The report of the Secretary, financial statement, report of Medical Economic Research under direction of

Dr. Frank Dickinson. This may be of interest to some of you, as it deals with life insurance examination fees.

2. Report on the Red Cross Blood Bank program.  
 3. Report of the Committee on Rural Health.  
 4. Recommendations regarding the Advisory Board for Medical Specialties.

5. Treasurer's report.

6. Auditor's report.

7. Report of the Committee on Hospitals and the Practice of Medicine. Your delegates would strongly urge every practicing physician to read this report. Study it and discuss it at staff meetings, as it is of vital interest to every practitioner of medicine who cares for patients in hospitals. It is exhaustive and authoritative.

8. Code of Ethics of World Medical Association.

9. Report of the Council on Industrial Health.

10. The American Medical Association program. Since you all know it, we will not discuss it here.

11. Mental hygiene.

12. Veteran medical care.

13. Industrial medicine.

14. Medical education and personnel; adequate funds free of political control. They suggest that various funds be given to our universities to keep them free from political control.

15. Activities of the Editor. Dr. Henderson presented the following report, which was referred to the Reference Committee on Reports of Board of Trustees and Secretary:

"The Board of Trustees is aware of the criticism of the Editor coming from within and from without the profession. The Board recognizes that the public has come to believe that the Editor is spokesman of the Association. The membership undoubtedly wishes the elected officials to speak authoritatively on all matters of medical policy.

"Against the time when the Editor retires, Dr. Austin Smith has for some months been in training as the Assistant Editor, and the talent of the Editor will be retained for the present under the control of the Board of Trustees.

"In view of the increasing responsibility of the Editor and reorganization of the department, the Board of Trustees has decided on the following points:

"1. The Editor will completely eliminate speaking on all controversial subjects, both by platform and by radio. Approval of all speaking engagements will be made by the Executive Committee.

"2. Elimination of all interviews, including press conferences, and statements by Dr. Fishbein except on scientific subjects.

"3. Editorials on controversial subjects will be supervised by the Executive Committee.

"4. Complete information as to these activities will be reported to the members of the House of Delegates.

"5. There will be permanent elimination of the Diary in Tonics and Sedatives.

"6. Plans for the training of a new Editor in an orderly manner, including the retirement of the present Editor, will be formulated.

"The Board of Trustees of the American Medical Association announces that plans have been formulated for the retirement of Dr. Morris Fishbein as Editor of the *Journal of the American Medical Association* at an appropriate time. For thirty-seven years Dr. Fishbein has served the American Medical Association well and faithfully. The *Journal of the American Medical Association* is an enduring monument to his genius and devotion. His activities have extended far beyond his immediate duties as an Editor, and the Board desires to pay tribute to his many accomplishments in other fields.

"The Board finds that serious dislocation would result from any sudden replacement. With this in mind, a reorganization of the editorial staff is under way so that his retirement, when consummated, will not result unfavorably for ventures of the Association.

"Respectfully submitted,

ELMER L. HENDERSON, M.D., *Chairman*  
 EDWIN S. HAMILTON, M.D., *Secretary*  
 LOUIS H. BAUER, M.D.  
 JOHN H. FITZGIBBON, M.D.  
 JAMES R. MILLER, M.D.  
 WALTER B. MARTIN, M.D.  
 DWIGHT H. MURRAY, M.D.  
 EDWARD J. MCCORMICK, M.D.  
 GUNNAR GUNDERSEN, M.D."

16. General Practice Sections on Hospital Staff. Resolution on the General Practitioner: Your Committee was much impressed with the arguments set forth by the proponents of this resolution, and is of the unanimous opinion that the general practitioner, who is in fact the very backbone of American medicine, should be assisted in every way possible to advance himself.



Your Committee is of the unanimous opinion that better training facilities should be arranged as promptly as may be found feasible, and that the American Medical Association should most urgently insist that hospitals make freely available to qualified general practitioners all of their facilities for the care of the sick.

Your Committee believes that it is the opinion of this House of Delegates that the reason for the existence of hospitals is for the better care of the sick, and for the promotion of the health of the American people. Your Committee believes that it is the opinion of this House that these ends will be best served by the existence of a large number of well-trained, thoroughly qualified general practitioners able to admit their patients to the hospitals in order that they may give them the very best medical care that may be provided.

To this end your Committee has rewritten the resolution introduced by Dr. DiNatale and submits it to the House of Delegates as a substitute resolution:

Whereas, for the best interests of his patient the general practitioner at this time deserves particular consideration; therefore, be it

"RESOLVED: That (1) graduate and postgraduate education for general practitioners should be made more widely available; and (2) two-year rotating internships especially designed for those who wish to train for general practice be set up as rapidly as possible."

Three of your delegates were appointed and served on Reference Committees—Dr. Barrett, Hyland, and Christian.

The Council on Medical Service made a long and exhaustive report on prepayment plans. We will now call on R. L. Novy, M.D., President of the Michigan Medical Service, who will speak on this subject. Dr. Novy was in conference with the Council and knows more inner workings than do we.

R. L. Novy, M.D. (Wayne) presented a brief statement on the status of the American Medical Association in regard to prepayment medical care plans.

L. W. CHRISTIAN, M.D.: The following resolutions were presented:

A—Improvement of the education of the general practitioner. Approved.

B—The \$25 assessment. Approved.

C—Condemned compulsory health insurance. Approved.

D—Voluntary health insurance. Approved.

E—Hospital and medical care of veterans for non-service-connected disabilities. Lost by a close vote. We feel it will be brought in again, as it appears to be of extreme importance to the veteran and the medical profession.

F—Asking AMA to be the sole agency to inspect hospitals. Disapproved because of the friendly relations with the College of Surgeons, and the added cost to the AMA. The Committee offered a substitute resolution, which is as follows:

"RESOLVED: That the American Medical Association highly commends the American College of Surgeons for its long-sustained efforts in the field of hospital standardization, and endorses its continued activity in this important field; and be it further

"RESOLVED: That the Secretary of the American Medical Association transmit a copy of this resolution to the Board of Regents of the American College of Surgeons." Approved.

G—Michigan resolution supporting AMA program and assessment. Approved, only after disapproval by reference committee.

H—Concerning study of intern training program. Approved.

I—Associated medical care plans enrollment agency. Approved.

Addresses of Leone Baxter and Clem Whittaker were well received. These addresses were a progress report of the AMA fight against the Truman administration plan

for compulsory health insurance. Both Whittaker and Baxter expressed confidence that with the help of the various state societies and individual physicians this fight can and will be won.

A new Code of Ethics prepared by the Judicial Council was adopted. We presume they soon will be distributed to every member of the AMA.

Heard addresses by Dr. A. Lawrence Abel of Great Britain, relating to the sad state of British medicine and urging us to remain free from political control.

Address of Surgeon General Clifford Swanson, Navy.

Address of Surgeon General Raymond W. Bliss, Army. Election:

President—Dr. Elmer L. Henderson, Louisville, Kentucky

Vice President—Dr. James Francis Norton, Jersey City, New Jersey

Secretary—Dr. George F. Lull, Chicago, Illinois

Treasurer—Dr. Josiah J. Moore, Chicago, Illinois

Board of Trustees: Re-election of Louis Bauer, New York

The 1952 meeting will be held in Chicago.

Gentlemen, this is the end of the report. May I tell the House this:

Your delegates at this time would like to pay tribute to the man whom we considered represented you most adequately—Tom Gruber. He never practiced medicine, but was more interested in the welfare of the patient and improvement of the medical profession than many of us. He was kind, friendly, and fearless. He knew everyone in the House and all the officers of the AMA, who liked him and respected his opinions and listened to his advice.

To us, who served with him, he was an inspiration. His timely advice and his judgment kept us from making costly mistakes on many occasions. We were awed at times by his knowledge of the intent of the House. His predictions were astonishingly accurate. He was a source of accurate information. He will be difficult to replace. We will miss him.

THE SPEAKER: The report was referred to Reference Committee on Officers' Reports.

## VII. Report of the Commission on Health Care

R. L. PINO, M.D. (Wayne): The problems concerned with the Commission on Health Care at its inception to some degree have been absorbed into other channels. These included problems of irregular practice, the Basic Science status, and Medical Associates.

During the past year publicity relative to Medical Associates has been carried on to a large extent through the Public Relations department. As noted in their report elsewhere in the Handbook, there have been many requests for the Medical Associates brochures. Some 15,000 copies have been distributed in secondary schools and colleges, to vocational counselors, and on request to many individuals and groups.

By invitation, the Commission has been represented before high school, college and faculty groups, with a response and interest of marked significance. The interest of parents, teachers and students in vocational goals is marked, and the opportunities in the health fields, as represented through Medical Associates, are receiving much attention through the distribution of the brochure. The woman's auxiliaries have been effective in this distribution and should receive much credit.

It was agreed at the beginning of the year with the Public Relations department that too concerted an effort toward the development of courses in public and private schools of the various sections of Medical Associates should not take place during this year, but rather for general publicity to take place and reactions noted.

With this year's experience it has increasingly become apparent that there is not only much interest educationally, but there is evidence of the increasing need of carefully worked out programs between educators and educational institutions with the medical profession in



enhancing the distribution of medical care by the training of more young people in these fields.

The problem is a large one in medical education and distribution in America, and one, it would seem, which should be promulgated comprehensively through a department of education or of distribution, or both, of the American Medical Association.

In Michigan the educational aspect of Medical Associates is of much favorable interest and concern in the Department of Public Instruction, and that Department has been most co-operative. What step should be taken next in an organized way, in connection with our teaching institutions in co-operation with the Michigan State Medical Society, demands study. The Commission on Health Care has created no expenditures this year directly other than any the Committee on Public Relations has made while the effect of the brochure and other contacts have been under observation.

It would seem that the activities of the Commission on Health Care should now be turned back to The Council for re-evaluation and direction or disposal into whatever channels The Council may deem appropriate.

Through the studies and observations of your Commission on Health Care we believe we can state unequivocally that the broad base of the pyramid upon which health care in America should rest will not be as stable as it could be if an Executive Vice President of outstanding potentialities, together with a strong cabinet of specialists in the fields of economics, of science, of law, education, distribution and public relations, were provided to assist the officers and Trustees of the American Medical Association in their very great responsibilities, which burden without adequate assistance they have borne voluntarily through the years.

THE SPEAKER: This report was referred to the Reference Committee on Miscellaneous Business.

## VIII. Resolutions and Motions and Petitions

### VIII—a. SPECIAL ASSESSMENT (\$25.00) FOR 1950

A. D. ALLEN, M.D. (Bay-Arenac-Iosco):

"Whereas, the need of additional funds for various purposes in the work of the Michigan State Medical Society is apparent; therefore, be it

"RESOLVED: That the special assessment of \$25 be continued for the 1950 year of the Michigan State Medical Society."

This resolution was referred to the Reference Committee on Reports of The Council.

## IX. Reports of Standing Committees

Reports as printed in The Handbook, were presented as follows:

### IX—a. COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

### IX—b. CANCER CONTROL COMMITTEE

### IX—c. PREVENTIVE MEDICINE COMMITTEE

### IX—d. COMMITTEE ON RHEUMATIC FEVER CONTROL

### IX—e. MATERNAL HEALTH COMMITTEE

### IX—f. COMMITTEE ON VENEREAL DISEASE CONTROL

### IX—g. COMMITTEE ON MENTAL HYGIENE

### IX—h. CHILD WELFARE COMMITTEE

### IX—i. COMMITTEE ON IODIZED SALT

### IX—j. GERIATRICS COMMITTEE

### IX—k. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE.

### IX—l. PUBLIC RELATIONS COMMITTEE

### IX—m. COMMITTEE ON PUBLIC RELATIONS PUBLICATIONS

### IX—n. COMMITTEE ON NEWSPAPERS

### IX—o. SUBCOMMITTEE ON RADIO

### IX—p. SUBCOMMITTEE ON CINEMA

### IX—q. ETHICS

### IX—r. LEGISLATIVE

### IX—s. SCIENTIFIC WORK

### IX—t. INDUSTRIAL HEALTH

### IX—u. TUBERCULOSIS CONTROL

The reports of all these Committees were referred to the Reference Committee on Standing Committees.

## X. Reports of Special Committees

### X—a. COMMITTEE ON STATE VETERANS' AFFAIRS

### X—b. COMMITTEE ON STATE INTERPROFESSIONAL COMMITTEE

### X—c. THE BEAUMONT MEMORIAL COMMITTEE

### X—d. THE SCIENTIFIC RADIO COMMITTEE

### X—e. ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

### X—f. LIAISON COMMITTEE TO THE MEDICAL ASSISTANTS SOCIETY

### X—g. ADVISORY COMMITTEE TO THE NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

### X—h. COMMITTEE ON INCREASE OF MEDICAL STUDENTS GRADUATED FROM MICHIGAN MEDICAL SCHOOLS

### X—i. COMMITTEE OF SIX TO STUDY BASIC SCIENCE ACT AND MEDICAL PRACTICE ACT

### X—j. PERMANENT CONFERENCE COMMITTEE WITH MICHIGAN HOSPITAL ASSOCIATION AND MICHIGAN NURSING CENTER ASSOCIATION

### X—k. MICHIGAN STATE MEDICAL SOCIETY LIAISON COMMITTEE WITH MICHIGAN STATE PHARMACEUTICAL ASSOCIATION

### X—l. MICHIGAN STATE MEDICAL SOCIETY LIAISON COMMITTEE WITH MICHIGAN HOSPITAL ASSOCIATION

The reports of all these Special Committees were referred to the Reference Committee on Special Committees.

## VIII—b. MOTION FOR SPECIAL MEETING OF HOUSE OF DELEGATES ON SEPT. 19, 1949

E. D. SPALDING, M.D. (Wayne): Mr. Speaker, I move that we have a special meeting of the House at 2 p.m. to consider what resolutions may be brought forward at that time, so that the Reference Committees may devote this afternoon to their consideration.

W. B. MITCHELL, M.D. (Kent): I second the motion.

(The motion was put to a vote and was carried.)

The meeting was recessed at twelve-thirty o'clock.

## MONDAY AFTERNOON SESSION

September 19, 1949

The meeting reconvened at two-fifteen o'clock, J. S. DeTar, M.D., Speaker of the House, presiding.

## XI. Amendments to Constitution and By-Laws

### XI—a. CH. 5, SEC. 3-g—BY-LAWS. RE ASSOCIATE MEMBERSHIP

C. K. HASLEY, M.D. (Wayne) introduced the following resolution:

"Whereas, there are some active members who are desirous of retaining their membership in the Michigan State Medical Society while pursuing postgraduate work, and it is deemed advisable that such members be exempt from the payment of membership dues and shall be classified as associate members for the term of their postgraduate work; therefore, be it

"RESOLVED: That paragraph (g) be added to Chapter V, Section 3 of the By-laws, to read as follows:

"(g) An active member, by transfer, for the period



of one year while he is temporarily out of practice on account of postgraduate medical studies. This may be renewed upon petition to The Council at its discretion.”

This resolution was referred to the Reference Committee on Constitution and By-laws.

#### XI—b. CH. 8, SEC. 2—BY-LAWS RE VOTING POWER OF VICE SPEAKER

E. D. SPALDING, M.D., presented the following resolutions that have to do with corrections of the amendment to the By-laws simply for the purpose of clarification.

“Whereas, according to the Constitution, Article IX, Section 1, a Vice Speaker of the House of Delegates is one of the six officers of the Society, aside from the Councilors, and

“Whereas, according to the By-laws, Chapter 8, Section 2, ‘Officers of this Society shall be ex officio members of the House of Delegates, and, with the exception of the Speaker of the House of Delegates, shall be without power to vote in the House of Delegates’, and

“Whereas, such a Vice Speaker as well as the Speaker are both duly elected delegates representing their County Societies, in contradistinction to the other four officers, and as such obviously should not be disfranchised; therefore, be it

“RESOLVED: That the By-laws, Chapter 8, Section 2, be amended by the insertion of the words ‘and Vice Speaker’ immediately after the word ‘Speaker’ in this Section.”

This Section will then read, if amended, as follows: “Officers of this State Society and members of The Council shall be ex officio members of the House of Delegates and, with the exception of the Speaker of the House of Delegates and the Vice Speaker, shall be without the power to vote in the House of Delegates.”

This was referred to the Reference Committee on Constitution and By-laws.

#### XI—c. CH. 9, SEC. 12, BY-LAWS—RE COUNCILOR DISTRICTS IN WAYNE COUNTY

E. D. SPALDING, M.D. (Wayne): “Whereas, according to its authority in the By-laws, Chapter 8, Section 3, the 1948 House of Delegates subdivided the 1st and 16th Councilor Districts (constituting Wayne County) to create two additional Districts, the 17th and 18th respectively, but did not specifically designate the boundaries of such, and

“Whereas, the local conditions in Wayne County are different from those in other Councilor Districts, it being a large metropolitan area; therefore, it is desirable to have the four Councilors representing this area selected at large, and not one from each of four permanently defined districts. In this way the ablest men available in the whole area may be selected irrespective of their location in the County, and

“Whereas, it is advisable to have this special procedure definitely set forth in the By-laws to avoid any future ambiguity; therefore, be it

“RESOLVED: That the By-laws, Chapter 9, Section 12, be amended by adding to this Section the sentence, ‘Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County,’ and that the ‘17th District—Wayne’ and ‘18th District—Wayne’ be added to the Councilor Districts listed in this Section.”

This Section then will read: “The following County Societies shall constitute the Councilor Districts of the States: . . . Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County.”

This resolution was referred to the Reference Committee on Constitution and By-laws.

#### VIII—c. PROPOSED REORGANIZATION OF AMA

R. H. PINO, M.D. (Wayne): “Whereas, the continuing brilliant advances made in the knowledge of health sciences has led to increasing complexities in the problem of applying these benefits to humanity, and

“Whereas, there are those that would deny the democratic process in the form they propose to use in applying these advances, implying that the freedom that brought forth these benefits is now incapable of dispensing them, and

“Whereas, the American Medical Association, representing the more than 140,000 practicing physicians in this country, is the responsible agency from which the profession, the Congress, and the public obtain impartial and accurate counsel, and

“Whereas, such increase in the administrative complexity has placed an ever-mounting burden on the leadership of the American Medical Association as to be now nearly beyond the possibility of continuing effective performance, without provision for adequate technical assistance and advice in the many fields affected, and

“Whereas, without such adequate technical assistance to leadership there is imminent danger that all that medicine has to contribute to the democratic social system be lost by default, thereby carrying down with it in its fall the other institutions of free enterprise; therefore, be it

“RESOLVED: That the necessary assistance to the leadership in the American Medical Association be provided by action of the House of Delegates of the American Medical Association, creating an Executive Vice President (not necessarily a Doctor of Medicine), assisted by a group of highly trained technical advisers in such fields as economics, public relations, government, political economy, medical education, medical distribution, and others; and be it further

“RESOLVED: That the Michigan delegates to the American Medical Association be instructed by this House of Delegates of the Michigan State Medical Society to present this resolution to the House of Delegates of the American Medical Association; and be it further

“RESOLVED: That all necessary measures be taken to inform other state societies of the wide purposes and intent of this resolution, and that before the next interim meeting, so that favorable support to this resolution may be effected.”

This resolution was referred to the Reference Committee on Resolutions.

#### VIII—d. UNIFORM POLICY IN POLIO CASES

R. J. ARMSTRONG, M.D. (Kalamazoo): “Whereas, some local chapters of the National Foundation for Infantile Paralysis pay only part of the cost of polio care, and

“Whereas, good public relations demand the uniform State policy either for full payment or for assistance with Michigan Crippled Children Commission funds; therefore, be it

“RESOLVED: That the Michigan State Medical Society House of Delegates request the Medical Advisory Committee to the National Foundation for Infantile Paralysis to promote the establishment of such uniform policy for financial assistance to polio cases.”

This resolution was referred to the Reference Committee on Hygiene and Public Health.

#### VIII—e. TESTIMONIAL TO THE LATE T. K. GRUBER, M.D.

“Whereas, the House of Delegates of the Michigan State Medical Society in the death of Thomas K. Gruber has lost an efficient and successful worker for the best ideals of the medical profession, and

“Whereas, Dr. Gruber was one who made a tremen-



dous contribution at the County, State and national level, and

"Whereas, he represented this body as a delegate to the American Medical Association for more than eleven years, and

"Whereas, we are charged with the heavy duty of continuing the effort with now his courage and example instead of his always cheerful and charming presence, and

"Whereas, work for the improvement of the profession is too often thankless and barren of marks of accolades; therefore, be it

"RESOLVED: That we, the delegates of the 84th meeting of the House, adopt this resolution as a token of our esteem and approbation; and be it further

"RESOLVED: That this resolution be spread upon the minutes, and a suitably embossed copy be presented to his widow as an expression of our loss."

This resolution was referred to the Reference Committee on Miscellaneous Business.

### VIII—f. RELATIONS BETWEEN MEDICAL STAFF AND HOSPITAL MANAGEMENT

R. F. FENTON, M.D. (Wayne): "Whereas, instances of the arbitrary use of power on the part of hospital management which results on the nullifying of the express will of the majority of the doctors of medicine that comprise the medical staff, and

"Whereas, this unfortunate abuse can lead to alarming and dangerous consequences, not the least of which is misunderstanding and ill will between members of the staff and management and other serious rifts; for it must be emphasized that both groups need each other, and in an atmosphere of co-operation and trust to achieve the beneficial results so important to the ill and afflicted; therefore, be it

"RESOLVED: That the House of Delegates request the Council of the Michigan State Medical Society to take such appropriate action as will promote harmonious relations between the medical staff and hospital management and foster the generally prevailing good relations that exist between these two bodies."

This resolution was referred to the Reference Committee on Legislation and Public Relations.

(The meeting recessed at two-thirty o'clock.)

## MONDAY EVENING SESSION

September 19, 1949

The meeting reconvened at eight-twenty o'clock, J. S. DeTar, M.D., Speaker of the House, presiding.

### VIII—g. FUTURE COVERS OF HANDBOOK FOR DELEGATES

O. K. ENGELKE, M.D. (Washtenaw): "Whereas, the Handbooks for delegates for this session were covered with a rather homely blue substance which deposited noxious material on the hands of all diligent delegates; be it hereby

"RESOLVED: That all future Handbooks be given dignity and prestige through the use of a combination of the proper shades of maize and blue, colors which will never fade."

THE SPEAKER: All in favor will please say "aye."

The resolution was adopted.

Gentlemen, before we proceed with the evening's business, there are two gentlemen here from Wisconsin, and I would like to introduce them.

Mr. Charles H. Crownhart is Secretary of the Wisconsin State Medical Society, and Mr. Roy T. Ragatz is his assistant.

## XII. Remarks of Guest Speaker Crownhart Re Medical Society Homes

MR. CHARLES CROWNHART: Mr. Speaker, and members of the House of Delegates of the Michigan State Medical Society: I would like very much indeed to make

a soul-stirring address to you tonight on President Truman's false leadership, or on Oscar Ewing's misplaced ambitions, and in some respects I would like to come before you and say that in bringing you greetings from Wisconsin we are so accustomed to having Michigan first—Michigan first in one million enrolled, Michigan first in its football team, and things of that similar character. But I have been assigned tonight, and I am here by invitation on that assignment, to tell you the action that has been taken by the State Medical Society of Wisconsin in housing its executive staff in permanent headquarters.

I recall (not so many years ago, at that) that my father said he hoped I would have a long and successful career practicing law. I have been seduced into being a Secretary of a Medical Society.

In consoling me on my future practice in law, he said, "Charlie, I hope you will buy a home, incur the indebtedness early, pay it off during your career, because as you sink your roots deep and well into the Capital of your home State it will give assurance that you will remain there as an active practitioner in your profession."

I think it must have been something of that sort that influenced the Council of the State Medical Society, with the approval of our House, to authorize the purchase of a home in Madison, which is our State Capital, and where, of course, we feel the executive offices should be in their manifold connections with various State departments, not omitting by any means the fact that the State legislature meets there.

We have a three-story home on the shores of Lake Mendota, and I would like to give you all a very cordial invitation, any time you are driving through the southern portion of America's dairyland, to stop and pay that place a visit.

The executive activities of the entire Society are housed in that particular location. Not only is the Secretary's office there, but the executive activity in charge of the hometown care of the veterans' program is in that building, along with three employees of the Veterans Administration, and the executive staff of the prepaid insurance plans, modeled somewhat after Michigan's, known as Blue Shield in Wisconsin, who are also located in the Madison headquarters. We have a three-story building, one portion of which has been set aside so that committees and the Council may meet there as the occasion demands. We have a cateress who is employed to serve meals and appropriate sideline dishes on the occasion of those meetings.

Let me say that it has brought to the Medical Society in one short period of year a feeling of friendship and of fraternity that never existed before, even though that spirit did exist in large part. Physicians from out in the State including Milwaukee, stop to pay us a visit. They make the parlors their headquarters while there. There are magazines, there are plenty of opportunities to use the telephone, even to engage in dictation if they have a letter they want to get out. One section of the house is set aside for the use of the visiting—well, I hate to admit this, but the executive staff calls them the "visiting firemen." They are all very important, however, because they pay dues.

We have a dining room service that is utilized for the staff during noon hours, and the staff of some twenty-eight people group together in the dining quarters every noon except on Saturday. We have had meetings there not only with our own committees and our Council, but the public relations individuals in many activities in Madison also have met there. The State Board of Health, the State Board of Medical Examiners and, God forbid, the Woman's Auxiliary, all have joined to utilize the headquarters offices as an informal location for their periodic meetings.

We in Madison are blessed with the four beautiful lakes which Longfellow wrote about. All of that has brought to the staff an esprit de corps that has been



excellent; it has brought the Blue Shield and the Veterans Administration and the central office group a feeling that, after all, they are all working in the field of medical economics and in the service of the medical profession for the preservation of public health as we view it. The physicians themselves feel a solidarity and an interest that I am sure did not previously exist to the extent that it does today.

If Michigan were to emulate Wisconsin for the first time, it might be that Michigan would be wise to provide its staff and its officers and Councilors with similar facilities.

In a brief word let me say to you in all sincerity and in all interest that I think the last decade has brought to the profession of American medicine a feeling that state lines, as well as county lines and city lines and sectional lines, have disappeared—have been dissipated—in the common interest that is that of medicine in preserving to the American people the first example (and it will always be the example) of the American way of life—free medicine and high public health and standards in this country, any politician to the contrary.

THE SPEAKER: Mr. Crownhart and Mr. Ragatz, we want to thank you very much for coming here and telling us what you are doing in Wisconsin.

#### VIII—h. PETITION TO CREATE 19th COUNCILOR DISTRICT

F. W. BASKE, M.D. (Genesee): I have a petition and a resolution from Genesee County. They really go together, and I will read the petition first and then the resolution:

"To the House of Delegates, Michigan State Medical Society. Gentlemen: Genesee County has become one of the large component parts of the Michigan State Medical Society, and under the present organization there are times, covering a period of five or more years, when its Councilor does not live within the boundaries of the County, but in some other part of the District.

"Flint, being the second largest automobile manufacturing center in the world, has developed a situation where its problems of public relations with the laboring class is quite different than that of rural or less industrialized areas, and requires close contact with our State officers at all times. A local Councilor who understands our mutual problems could best serve our interests and those of the State Medical Society in its effort to maintain the best of relations with the public.

"Therefore, the Genesee County Medical Society hereby petitions the House of Delegates of the Michigan State Medical Society to set aside the entire County of Genesee as the 19th District, with a Councilor of its own."

#### VIII—i. SURVEY OF MSMS COUNCILOR DISTRICTS

"Whereas, it is apparent from time to time that certain of the larger county medical societies are not represented on The Council nor in direct contact with the officers of the State Medical Society, and

"Whereas, we believe a more cohesive working unit could be secured by having every large county unit represented on The Council at all times, and

"Whereas, this cannot now be accomplished and still maintain adequate representation from the less populous areas; therefore, be it

"RESOLVED: That a special committee be appointed to study the possible regrouping of counties in Councilor Districts to attain better representation of the larger societies, and report their findings at next year's House of Delegates."

This resolution was referred to the Reference Committee on Constitution and By-laws.

### XIII. Reports of Reference Committee

#### XIII—a. ON OFFICERS' REPORTS

W. S. REVENO, M.D. (Wayne): Your Reference Committee on Officers' Reports considered the addresses of the *Speaker of the House*, the *President of the Society*, the *President-elect*, and the report of the *delegates to the American Medical Association*, and have these comments to make:

1. Address of the *Speaker of the House*, Dr. John DeTar: Dr. DeTar is to be commended for his very able presentation calling attention of the delegates to the glaring discrepancies inherent in Senate Bill 1679, and the commendable criticisms as enumerated in the Hoover Report. The issue of centralization v. decentralization was effectively enunciated and the need for close study of the Hoover Report as potent ammunition in the continuing defense against federal medicine was sharply emphasized.

2. *President Sladek's address*: The President called our attention to the importance of impressing on the public that federal medicine is not good for the American people; that we must strengthen our grass roots politics, broaden our horizon and join with other groups against the threat of socialization. Attention was directed to the community activities in which doctors had participated or been the leaders during the past year. These are the Michigan Heart Association, the Michigan Health Conference, and the Rural Conference on Health. The need for appointing a joint committee from the Michigan State Medical Society and the State Board of Registration in Medicine for revamping the Medical Practice Act was discussed.

3. Address of *President-elect Barstow*: Dr. Barstow emphasized the importance of continuing the C.A.P. program, broadening the base of our public relations activities, and constantly improving our contacts in Washington.

The failure of some physicians to fulfill their obligations in serving the public was decried, and the recommendation was made that such infractions be dealt with promptly through grievance committees at the local county medical society level.

Dr. Barstow urged prompt action in providing more adequate quarters for the executive offices of the Society.

4. Report of *Delegates to the American Medical Association*: This report, covering the interim session in St. Louis and the annual session in Atlantic City, is most comprehensive, and the delegates deserve commendation for their devoted interest and telling activity in behalf of organized medicine and this Society. They deserve honorable mention for their outstanding efforts in promoting the passage of a Michigan-sponsored resolution.

Your Committee was impressed with the high calibre of the addresses of the Speaker, President and President-elect, and the report of the delegates to the American Medical Association. It feels that the interests of the Society are secure in the hands of such capable men.

Mr. Speaker, I move the adoption of this report.

J. E. LOFSTROM, M.D. (Wayne): I second the motion.

The motion was put to a vote and was carried.

#### XIII—b. REPORTS OF THE COUNCIL

P. E. SUTTON, M.D.: *This Reference Committee reviewed the annual report for 1949 of The Council and approved the entire report as contained in the Handbook, pages 39 to 57, with two exceptions, on which I will now comment.*

Exception 1 is contained on page 41. This has to do with the Journal, and under the report on the Journal the Committee additionally recommends to the Publication Committee that in the roster number the addresses of the members be given.

The second exception is on page 55 and has to do with the report on Medical Library Service. This report is approved, with the additional recommendation that the accessibility of the University of Michigan Library Service be publicized to the membership.

I move the adoption of this report.

E. G. KRIEG, M.D. (Wayne): I second the motion.

The motion was put to a vote and was carried.

P. E. SUTTON, M.D.:

Exclusive of the report and recommendation pertaining to Michigan Medical Service, the Committee approved the Supplemental Report of The Council and recommendations contained in the report read by the Chairman of The Council, Dr. Beck, this morning, with one exception which has to do with their recommendation No. 9, our recommendation No. 8. I will read the resolution so you will know what we are adding.

The resolution as recommended by The Council is as follows:

"That the House of Delegates give study to clarify the conflict between the American Medical Association interpretation and the 1948 Michigan State Medical Society House of Delegates resolution on the subject of



## PROCEEDINGS EIGHTY-FOURTH ANNUAL SESSION

dispensing of eye glasses. The Reference Committee further recommends that the matter be referred to The Council for study and action."

I move the approval of the Supplemental Report of The Council, with the exception of the item on Michigan Medical Service and the dispensing of glasses.

C. L. WESTON, M.D. (Shiawassee): Second the motion.

The motion was put to a vote and was carried.

P. E. SUTTON, M.D.: The first recommendation of The Council has to do with the Michigan State Medical Society and the American Medical Association in detail, as follows:

"That each and every member of the Michigan State Medical Society co-operate wholeheartedly and to the best of his ability, both by action and financially, to the National Education Campaign of the American Medical Association, and that each member feels it an honor and a privilege to aid the American Medical Association not only by payment of the small AMA assessment but by vigorously entering the AMA program of active and direct resistance against attempts to throw the practice of medicine into politics."

I move the adoption of that recommendation, Mr. Speaker.

B. M. HARRIS, M.D. (Washtenaw): Second the motion.

The motion was put to a vote and was carried.

P. E. SUTTON, M.D.: The second recommendation has to do with a legislative bill introduced in 1949 and not passed, as follows:

"That the Michigan State Medical Society Legislative Committee be instructed to reintroduce into the 1951 legislature a proposal similar to S.B. 292 of 1949, to permit the exemption of interns and residents from the provisions of licensing under the Michigan Medical Practice Act for a period of not over six years in order to authorize postgraduate hospital training beyond one year, and to encourage more doctors of medicine to train and locate in this State; and further, that the Legislative Committee utilize all its efforts well in advance of the 1951 legislative session, to insure that this proposal is well understood and is favorably received by the Michigan lawmakers and all other interested parties."

I move the adoption of this recommendation, Mr. Speaker.

C. S. CLARKE, M.D. (Jackson): I second the motion.

The motion was put to a vote and was carried unanimously.

P. E. SUTTON, M.D.: The third recommendation has to do with our need for a building:

"That the House of Delegates specifically authorize The Council to purchase or build a building with suitable space and dignity to house the executive offices of the Michigan State Medical Society, in order to remedy the critical situation of overcrowding in the present inadequate space."

I move the adoption of this resolution.

R. A. SPRINGER, M.D. (St. Joseph): I second it.

The motion was put to a vote and was carried unanimously.

P. E. SUTTON, M.D.: The fourth recommendation is as follows: "That the Committee on Constitution and By-laws of the House of Delegates be requested to give consideration to several necessary amendments to the 1948 revised Constitution and By-laws recently referred to the Committee by The Council."

I move the adoption of this recommendation.

L. T. HENDERSON, M.D. (Wayne): Second the motion.

The motion was put to a vote and was carried unanimously.

P. E. SUTTON, M.D.: The fifth recommendation is as follows: "That Wilfrid Haughey, M.D., of Battle Creek, long-time Councilor and former State Society Secretary, who is presently Editor of the Michigan State Medical Society Journal and official representative of the State Society to numerous ancillary health groups, be considered by the House of Delegates as recipient of an

award, to be designated as 'President for a Day'; this honor to be conferred on the occasion of Officers' Night, September 21, 1949, during the Michigan State Medical Society annual session in Grand Rapids."

I move the adoption of this recommendation.

The motion was severally seconded, was put to a vote, and was carried unanimously.

P. E. SUTTON, M.D.: The sixth recommendation has to do with our special assessment, as follows: "That the special assessment of \$25 be continued for the year 1950 in order to meet the need of additional funds for various purposes in the work of the Michigan State Medical Society."

I move the adoption of the recommendation.

C. L. WESTON, M.D.: I second the motion.

The motion was put to a vote and was carried unanimously.

### XIII—b-1. RESOLUTION ON SPECIAL ASSESSMENT (\$25.00) FOR 1950

P. E. SUTTON, M.D.: The following resolution was presented to the House of Delegates this morning by A. D. Allen, M.D.

"Whereas, the need of additional funds for various purposes in the work of the Michigan State Medical Society is apparent; therefore, be it

"RESOLVED: That a special assessment of \$25 be continued for the 1950 year of the Michigan State Medical Society."

The Reference Committee felt that inasmuch as the resolution from The Council covered the matter, this resolution should not be adopted.

I so move.

L. W. HULL, M.D. (Wayne): I second the motion.

THE SPEAKER: It is the opinion of the Chair, gentlemen, that we have adopted a recommendation but we have not adopted a resolution covering the same ground. If you wish to implement further your action, you may well adopt the resolution. There will be no mistaking the question then.

The Chair will ask all who are in favor of adopting the resolution authorizing \$25 special assessment, to vote "yes." The Chairman of the Reference Committee recommended non-approval. I am going to ask for a vote of all those who are in favor of adopting the resolution.

If there is no further discussion, all those in favor of adopting the resolution will say "aye"; opposed, "no." The motion is passed. The resolution is adopted, implementing the recommendation.

P. E. SUTTON, M.D.: The next recommendation is that the House of Delegates instruct the Publication Committee of The Council to publish only a résumé of the annual proceedings of the House of Delegates, which shall include in complete form all resolutions, motions, and actions of the House.

I move the adoption of this recommendation.

ARCH WALLS, M.D. (Wayne): I second the motion.

The motion was put to a vote and was carried unanimously.

### XIII—b-2. COUNCIL'S RECOMMENDATION RE DISPENSING OF EYE GLASSES

P. E. SUTTON, M.D.: The next recommendation has to do with the eyeglass problem.

"That the House of Delegates give study to clarify the conflict between the American Medical Association interpretation and the 1948 Michigan State Medical Society House of Delegates resolution on the subject of dispensing of eyeglasses, and further recommend that the matter be referred to The Council for study and action." (See Page 1509)

I move the adoption of this recommendation.

DOUGLAS DONALD, M.D. (Wayne): I second the motion.

After discussion, the motion was put to a vote and was lost.

THE SPEAKER: What is the pleasure of the House in regard to this matter? The matter still stands on the floor. We have the recommendation before us for our disposition. What is the pleasure of the House?

R. W. TEED, M.D. (Washtenaw): I move the question be referred back to the Reference Committee for further study.

J. R. HEIDENREICH, M.D. (Menominee): I second the motion.

The motion was put to a vote and was carried unanimously.



P. E. SUTTON, M.D.: We have concluded the recommendations (exclusive of the recommendations pertaining to the Michigan Medical Service) and I now move the adoption of the report of the Reference Committee on Reports of The Council this far.

G. C. PENBERTHY, M.D. (Wayne): Second the motion.  
The motion was put to a vote and was carried.

### XIII—b-3. COUNCIL'S RECOMMENDATION RE NEW MMS CONTRACTS

P. E. SUTTON, M.D.: The one consideration which has been left out thus far was the matter referred to the joint Reference Committees on Reports of The Council and Medical Service and Prepayment Insurance.

"The Committee reviewed the report contained in the Supplemental Report of The Council having to do with certain changes to be recommended by the House of Delegates to the Michigan Medical Service. The Committee approved the report, and recommends the adoption of the following recommendation:

"(a) That the income limits in the Michigan Medical Service policy be increased to \$5,000.

"(b) That the schedule of fees or benefits paid by Michigan Medical Service be increased approximately 40 per cent.

"(c) That Michigan Medical Service provide that all hospital services of physicians, both medical and surgical, be included as benefits.

"(d) That Michigan Medical Service continue all the present forms of contracts affecting the \$2,500 income limits."

Most of the men in this room know all of the things that have transpired in the past nine or ten years with respect to dollar value, wage levels and income levels. It appeared to the Committee, as we listened to the evidence, that we have lagged considerably in bringing this particular matter up to date.

Furthermore, it has been considered, recommended and urged upon us for three years (this being the third year), so belatedly the Committee brings this recommendation to you, the first item being that which I have just read, namely, that the Michigan Medical Service policy be increased to \$5,000.

The second item is that the schedule of fees for benefits paid by Michigan Medical Service be increased approximately 40 per cent.

May I have the privilege of a bit of explanation and discussion, which may not be the final discussion or explanation. There are others in this room who know much more about the background and the reasons for these things. As it was discussed in the Committee today, it was stated by Mr. Ketcham and Dr. Novy and others who have experience in establishing fee schedules, that while The Council made no recommendation as to the approximate increase of fees, they recommended that the schedule of fees paid by Michigan Medical Service be increased; the Committee added "approximately 40 per cent" with the understanding, of course, as it was stated, that Michigan Medical Service will not suffer a loss. They will have to charge that premium and pay that fee which keeps them solvent, so actually the amount that this fee is to be increased will remain with the Board of Directors of our Michigan Medical Service.

How the figure of 40 per cent was arrived at, I would prefer to have someone else discuss. Dr. Haughey was present, and he can tell us how that figure came in. Dr. Novy is here, and he can tell us something about this figure. There are others here who could tell us about that figure if you desire to question it. The third item is that Michigan Medical Service provide that all hospital services of physicians, both medical and surgical, be included as benefits.

I will not comment on that particular item.

The fourth item is that Michigan Medical Service continue all the present forms of contracts affecting the \$2,500 income limits.

If I may comment on this: It might be questioned that it is implied, but I personally believe, as a criticism of this recommendation, that it is implied, but not stated,

that there will be two types of fees—that fee paid at the lower level, which it is stated here will be continued to be serviced by Michigan Medical Service, "all the present forms of contracts affecting the \$2,500 income limits."

It would be obvious to most of us, and yet it might be a criticism, that you can't keep one level, as far as the income group is concerned, and service it as it is now serviced, and yet agree to the second item, which says that there will be an increase of fees of approximately 40 per cent. There must be a differential. That was implied, and I believe it is obvious; but that question, I am sure, will come up if I do not so state.

*The Committee wishes to recommend, and moves the adoption of this report as amended.*

C. J. BARONE, M.D. (Wayne): I second the motion.

THE SPEAKER: The motion is that the report given us by The Council, as amended, be adopted by the House. That involves the four points—the \$5,000 limitation, the approximately 40 per cent increase in fees, the including of all hospital services of physicians, and the continuation of the present \$2,500 contract in whatever form it is now being sold.

W. S. REVENO, M.D.: I would like to know whether this matter has been brought up before the Insurance Commissioner. We are operating the Michigan Medical Service under State law, and it is a definite requirement that any changes in the contract must clear with the Insurance Commissioner.

R. L. NOVY, M.D.: This problem has been brought up before to this group; this is the third year. The last year you were here it was brought up, and your consent to an increase was given. At that time we prepared a contract ready to be put into effect. We did not feel we wanted to put it into effect until this group had thoroughly understood the thing, and that is the reason why it is brought up here. That contract has been ready since last October or November, and can be put into force if we wish to do so. That carries a slightly different income limit than this one here.

E. D. SPALDING, M.D.: A point of information, Mr. Speaker. I would like Dr. Novy to clarify two points:

First, what is meant by increasing the limit to \$4,000 or \$5,000 and still maintaining the \$2,500 figure? Are they two policies, or not?

Secondly, I would like to have Dr. Novy make clear (as he has done to me) the fact that if a person in the lower income group goes into a hospital and has a private room and regular nursing round the clock, of his own demand, he therefore takes himself out of that income group, and therefore cannot expect to get complete medical coverage under the low income figure.

R. L. NOVY, M.D.: To reply to your first question, at the present time we have a contract that has a \$2,500 family income total. That contract will stay because there are still a great many people in this State whose family income is in that range.

A second contract totally separate from the other will be made available, and it is possible for anyone to take either one. The second contract would say that the income limit is \$5,000 and that the fee schedule will be proportionately increased somewhere around 40 per cent over the other. That will be another contract.

That is a contract that you may call a de luxe contract. It is a contract, however, that will cover 80 per cent of the people, the same as the \$2,500 contract covered 80 per cent of the people in 1940. They are two separate contracts.

It is necessary to maintain those two, and especially the lower one, for the reason that we are very much concerned about low income people. There are such, and to ask them to pay a premium that would cover the de luxe contract, if I may use that phraseology, would be an injustice to them. Any group would have the opportunity to choose between those two. If they chose the \$2,500 group, the status that is now present would be in force.

To come to the second point of your request, and to review what most of you know, there is a limitation on the \$2,500, or it would also apply to the \$5,000 contract. Those contracts are issued first and foremost for a ward or semi-private two-bed room. They are not issued for any private room. If any individual wishes the luxury of a private room along with the accoutrements that go with a private room, he automatically takes himself out of any income limit classification that he may belong to, and is subject to any charge the doctor sees fit to make. You are all acquainted with that feature.

Repeating it in a slightly different way, your patient is taken to a ward bed. His income is under \$2,500. We have agreed that with that low income group we should stand by a fixed schedule of payment. But, say, this man, his family and relatives decide they would like to have him in a private room with a telephone, a bath, and so on. He is moved up to a private room. If his relatives can indulge him in the luxuries of a private room, they automatically take that individual out from under any income limitation, and the doctor has the privilege of charging the fee he wishes. That also would apply to the \$5,000 limit.

Is that clear, and does that answer your question, Dr. Spalding?

E. D. SPALDING, M.D.: Your statement is plain, but whether it will stand up or not is another question.

R. L. NOVY, M.D.: It does stand. At the present time on the \$2,500 I think those who are present will agree with that.



# PROCEEDINGS EIGHTY-FOURTH ANNUAL SESSION

W. S. REVENO, M.D.: The question I asked a while ago was whether this proposition has been cleared with the Insurance Commissioner, and whether Michigan has thus granted the Michigan Medical Service power to issue two contracts, one limiting the policyholder whose income level is below \$2,500, and the other to those whose income has a top limit of \$5,000, for the same type of service that is being rendered.

R. L. NOVY, M.D.: The \$5,000 contract has not been presented. We have had discussions in regard to \$4,000. I will have to ask for an exact answer. I see Mr. Ketcham in the back of the room. Can you answer that specifically and exactly?

Mr. Ketcham, the question specifically is this: The \$2,500 schedule now in force has been cleared. Has a second one of \$5,000 been cleared with the Insurance Commissioner? That first answer, of course, is "No," because that has not been brought up; but a similar one at the \$4,000 level was ready to go last fall. What is the answer in regard to clearing that with the Insurance Department?

MR. KETCHAM: There has been no application filed with the Commissioner of Insurance for approval of any other contract than the one now in force. It has been discussed thoroughly, unofficially and off the record, and so far there has been no objection raised to any reasonable contract that we wish to issue, as long as the rate is adequate for the benefits provided.

R. A. JOHNSON, M.D.: Mr. Speaker, I have a question for Dr. Novy. The comment has been made that this will be a 40 per cent increase in fees. I think that point needs clarification. The fees are pretty much standard, and it is the intent, as I understand it, of this new schedule, to have the new fees approximate current fees, rather than be in actuality a 40 per cent increase in fees. Will you clarify that point, Doctor?

R. L. NOVY, M.D.: That recommendation, of course, is not specific in the sense that it must be 40 per cent. It is obvious that a great deal of study would have to be made in order to determine what is the proper change. It is intended that the fee schedule, as put out for the \$5,000 policy, shall be the going charges that are made to that group at the present time, not more and not less.

R. A. JOHNSON, M.D.: Is that in the resolution?

R. L. NOVY, M.D.: That is in the resolution, yes. The 40 per cent was put in the statement with the word "about." They very definitely mean "about." It doesn't mean 20 or 60 per cent, but it does mean somewhere in the neighborhood of approximately 40 per cent.

We have a number of approaches to that, none of which yet to my mind can be accepted as final. I will mention some of the approaches we have: We have had the charges made to a certain employed group in which all the hills that were rendered to that employed group were received, and we could then find out how much they were greater or less than the amount that the Michigan Medical Service currently pays. That is one approach.

We had a second approach that no longer is as accurate as it was, and that is the approach to Genesee County, where the hills from Genesee County were sent direct to the patient and forwarded to us, and we kept those hills and we kept track of the charges that were made. Those bills were a great deal more in the past than they are at present.

We have a third method of approach in the fee schedule that was set for government agencies, recently passed, in which the current rates for government agencies were requested, and the returns came in on that.

The returns from the fee schedule for government agencies were roughly in the neighborhood of 20 per cent higher than the current Michigan Medical Service fee schedules. 20 per cent or slightly better. Forty per cent is definitely higher than the returns we had throughout the State.

May I digress at this point to say that the returns in regard to the uniform fee schedule for government agencies requested from The Council were most gratifying. A large number are replying. The replies in regard to office visits that were sent out supplementary to the first, brought back something more than 2,500 returns. You will recall that the total Society numbers somewhere around 4,400 or 4,500. That return was very striking.

C. J. BARONE, M.D.: I would like to call attention to the fact that when you get to the \$5,000 limit—you have just heard the statement made that it covers about 80 per cent of the population. Dr. Novy said this noon about 62 per cent. The Committee Chairman said 80.

R. L. NOVY, M.D.: I didn't use the figure of 62, sir.

C. J. BARONE, M.D.: We won't argue about that. On that percentage of the population you gentlemen are going to be participating physicians and working on a fading fee basis, just the same as you would under a government insurance plan.

R. L. NOVY, M.D.: I wonder whether a bit of clarification on that is necessary. I don't see too much doubt on that, and I want that perfectly plain and clear. May I make that clear.

In 1940 approximately 80 per cent of the population had family incomes, group incomes, family group incomes, of \$2,500 and less. The dollar has depreciated in value, and you may say your income is greater but you are no richer, even if you count your dollars greater.

Today figures from different sources will vary slightly; the last figures that were available were that there were somewhere between 70 and 80 per cent of the population whose incomes were below \$5,000. In fact, the latest figures available on that show

a little discrepancy in the sense that there are fewer people below \$5,000 today than there were below \$2,500 in 1940.

Let me add another point to that: When the \$2,500 fee schedule was set, it meant that approximately 16 to 20 per cent of the population was over income, and therefore not covered by the service feature. If this \$5,000 income should be put into effect, it would be approximately or close to 30 per cent (the figures I am thinking of give 32 per cent) who would be above income, and therefore not covered by the service feature.

C. K. STROUP, M.D. (Genesee): Would you please amplify your statement that your findings from Genesee refer to the past and not to what is going on now?

R. L. NOVY, M.D.: Yes. Some years ago the situation in Genesee County was quite tense in regard to this whole problem. Everybody is aware of that. You are also aware of the many times we have taken gibes at Genesee County, when they would not accept even a check on the Michigan Medical Service and had to have payments made in cash. We have ribbed them a great many times about that, where we had to send cash up with a gun on a man's hip because he was carrying too much of it to dare go into Genesee County without a gun.

In other words, the co-operation in Genesee County was flatly nil. Today that picture has very definitely changed. The co-operation is much, much better. We have doctors participating in Genesee County, a thing that was not true just a few years ago. Correspondingly, the reports coming from Genesee County, while they may not be participating and while they may not have signed their name on the dotted line, while their County may not have taken action, nevertheless they are co-operating in spirit and no longer do we have these reports and the condition that we had before.

At one time there was opposition when the original fee schedule for government agencies came up. We were waited upon by a delegation from Genesee County, consisting of several men who represented certain specialties. One of the things they complained about was that the fee schedule for tonsillectomies was not high enough, that it should be raised more. I forget exactly whether they wanted \$35 or \$40 for a tonsillectomy. They came down demanding that that be given consideration. I presented to that delegation 2,000 bills from Genesee County that they themselves had rendered to their patients, in which the average of those bills varied from the average arrived at throughout the State by something less than 20 cents. It was \$30.

That type of information, because of the increased co-operation, because of the change in attitude, is no longer considered by us as accurate as it was in the beginning. In the beginning it was an excellently accurate judge.

L. J. MORAND, M.D.: I don't want to ask any questions because I don't think anybody here can answer the question that is bothering me. I don't think any one of us can know whether there should be a 40 per cent increase, or whether it should go up to \$5,000. We have no actuarial evidence or background to know. Time will tell. This is too broad for any one individual or any one group of individuals to prognosticate the outcome.

My thought is this: I am not talking against this, but I am asking myself a question and I want to give you my thought: If we take on up to \$5,000 and over \$5,000, as a matter of fact, at the actual time, at this sitting we have executors of General Motors who have our insurance or our benefit, although it smells the same to me—however, the fact still remains that we have no limit, and anybody can have a policy in the Michigan Medical Service.

Are we going to take 80 to 95 per cent of our practice on this policy? What is going to happen if we do? Pressure groups may come along—and right now, at the present time, you all know that the coal industry and the steel industry and the Ford industry and the CIO are in process of trying to see what they can wring out of the employers—and, as in the past, probably will be quite successful. What does that mean? Does that mean that maybe later on the pressure groups will say, "Our employers are going to pay for this?"

Last year the federal government promised federal medicine. It didn't get across, but it may get across some other time. Those things have happened with other matters. They happened with prohibition and with the election last year. A lot of money was lost at the last election. It may happen with us.

Are we building up an organization so that it is going to be possible for the federal government to step in and say, "The doctors built this up themselves, and this is what they want?" The pressure groups are going to say, "We have the same doctors, and why should we pay a premium on a policy when our employers will take care of a premium?"

Are we creating a monster that is going to devour us? Are we becoming the rope that is going to hang us? I don't suppose you can answer that, either, but that is my thought, and I wanted to give it to you.

J. A. WITTER, M.D. (Wayne): Just as a matter of information (and I am new in the House of Delegates), I would like to know why we as doctors would not be better off to have 80 per cent of our patients in the over-income group, in order that our charges to them can be more fittingly adjusted? It seems well to me to have a policy available (as the present one apparently is) not only to the man with an income up to \$2,500, but mainly with people over \$2,500 having that same privilege, and the doctors having the privilege of adjusting their charges accordingly.

Why are we complaining about limiting ourselves up to the \$5,000 group? Why not leave that base payment that helps out most of the people who come to us? It allows so much if they are over income on their professional bill. It usually covers a good percentage of it.

The people are happy to have that percentage covered, and



rarely mind paying the balance. Why should we limit ourselves by adding another 30 or 40 per cent and saying that this has to cover it? It seems far more flexible as it is, and probably far less expensive to the consumer.

R. L. Novy, M.D.: In 1940 we said that we would cover approximately 80 per cent of the population. Due to the fact that the dollar is no longer the dollar of 1940, we are now covering closer to 20 per cent of the population. We are attempting to do something to prevent government medicine. We are attempting to cover a certain group of the population so that they can prepay for an illness.

All business at the present time (with the exception of the medical business) has developed time payments for commodities that amount to any substantial figure. You buy an automobile on time payments; you buy almost anything on time payments. There is nothing available in the medical profession except this plan to provide time payment for a catastrophe that is going to cost you at least the cost of a secondhand automobile.

We have a service plan to offer. There is no other organization except the medical profession that can offer a service plan. If we are going to offer nothing but an indemnity plan, so much paid, like any indemnity company offers, we had better get out of the cold problem that is before us and let the insurance companies handle it.

We brought forth this idea because the insurance companies were not answering the demand of the public, and the public was turning to government to put in a socialized program that would take care of that over-all cost of large illnesses. We have put in this block; it is very effective; it is effective to the extent that the program that President Truman originally intended to put through has felt the impact of that not only from us as doctors but also has failed to have the pushing support of the unions themselves.

They are not crazy for government medicine, strange as it may seem. They know the dangers that come from it, but they have no alternative between nothing done to arrange prepayment for illnesses, and government. Under those conditions it is easy to push in the government's direction.

We put in this movement in order to block that very effort. We find that what we set out to do in 1940, due to the depreciation of the dollar, has depreciated in what we claim for it, and we are no longer accomplishing what we set out to do. We are coming closer and closer to being nothing more than an indemnity company. I will have nothing to do with an indemnity company, and when we get down to the point that we are nothing but indemnity then let's let the indemnity companies handle it.

Let's carry on. What has happened in the ten years? From 80 per cent covered it has dropped to 20 per cent covered. We have failed by that much to keep up the very thing we started out to accomplish. The very weapon that we developed to block state medicine—the only weapon that has been developed in answer to state medicine has become dulled because we have not recognized that the dollar no longer buys what the dollar did.

Let me say one thing: The man whose income was \$2,500 in 1940, and the man whose income today is \$5,000, is no richer. They are on the same plane. Each of them can buy the same amount of bread, and no more. It sounds more in dollars, but it is no different in bread.

DOUGLAS DONALD, M.D.: One question I would like to ask to clarify this: Up to the \$5,000 bracket, and now medical as well as surgical benefits. There never have been any medical benefits before. Being a medical man, I would like to have this more explicit.

R. L. Novy, M.D.: Dr. Donald, you are a good friend of mine and you say there have never been medical benefits? There have been medical benefits for two and a half years.

DOUGLAS DONALD, M.D.: Where?

R. L. Novy, M.D.: There are covered at the present time in the State of Michigan about 65,000 people who have medical benefits. Your practice may be among the elite and you don't get it.

The new part of this thing is intended to be offered not as surgical alone, but medical and surgical. That is to say, any patient who goes into the hospital will have a policy covering both medical and surgical—in other words, covering illnesses within the hospital and not restricted to just a surgical setup.

H. C. HANSEN, M.D. (Calhoun): Is there any contemplated change to be made in the universal government agencies?

R. L. Novy, M.D.: The State Society last fall, a year ago, appointed a committee to investigate a fee schedule for government agencies, such agencies as the veterans' group, Crippled Children, and so on, and you received circulars on that. We will talk about that a little tomorrow, in some lantern slides I will throw on at that time. That fee schedule has been completed, and complete revision made thereof, and has been turned over to The Council and reported to The Council for their action. It will be printed shortly, I believe.

S. L. LOUPEE, M.D. (Cass): One more question comes to my mind: Do you propose to continue to offer this service only to groups?

R. L. Novy, M.D.: Is Mr. Goodrich back there? Do you have that chart on the enrollment of individuals throughout the State?

MR. GOODRICH: I will have it in a few minutes.

R. L. Novy, M.D.: While he is bringing it in I will answer that question briefly, and then I will flash on a chart to show you. Throughout the State we have been progressing from county to

county, or groups of counties, or, in some cases, cities, and have been putting on a campaign of several weeks' duration through the newspapers, radio, pulpits, doctors' offices, and whatnot, in various communities, saying that on a certain date the individuals could enroll in Michigan Medical Service. We have given them a period of about a week to enroll after this campaign was originally started.

The campaign was on, a date was set, and such was put on. We had such a campaign here in Grand Rapids a relatively short time ago, a few months ago, and the campaign carried with it local advertisements in the papers, on radios, and maybe the local men can tell me a great deal more about it than I know. It included a banner across the City Hall, in which enrollment was thrown open to individuals.

It is obviously impossible to enroll individuals at quite the same rate that you enroll groups, because of the actuarial difficulties of handling individuals; but it was thrown open to individuals. At the same time we very frankly said, "If you can get together a group of five or more, you can enroll." It requires only a group of five with a common source of income to join.

Here in the city of Grand Rapids that campaign was put on, and the enrollment period occurred for weeks. Out of the city of Grand Rapids, which has in the metropolitan area something in the neighborhood of a quarter million people, I will let you guess for a second how many individuals availed themselves of that opportunity to get it. It was advertised ahead of time by all methods that could be brought to their attention. I hear someone guess 5 per cent. I won't ask for other bids.

Out of a quarter million people in this metropolitan area, 700 people availed themselves of that opportunity!

Covering that same feature, this chart has various colors on it. It shows the area throughout the state where we have offered to individuals this contract by that kind of campaign. The only areas where we have not offered it are shown marked in white; the other areas in different colors represent where we have offered it twice, and some areas in which it is now in the process of being offered.

In some of the areas, such as this big block up in here, we were met by objections to putting it in there by the Commissioner of Insurance because of non-availability of hospitals in some of the areas around there, and they said they would have to go too far to a hospital in order to get it. It would be something like twenty miles. You can cross Detroit's twenty miles very easily, but in the Upper Peninsula twenty miles is considered to be too far to be worked out. I believe that block will be taken care of.

When you say that the Michigan Medical Service hospital and medical plan has not been given to individuals, here is the map that shows it. The white spots are the only spots in the State of Michigan where that has not been offered or is not being offered. The diagonal marks show where it has been offered at least twice.

One other comment along exactly the same line: This is not easily seen from where you are sitting, but it represents the Farm Bureau enrollment, and where that Farm Bureau enrollment is present is shown here by numbers. It is too far away for you to read those numbers, and yet we have definitely covered the Farm Bureau on that.

S. L. LOUPEE, M.D.: I wish very definitely to state that I did not infer you have not offered this to individuals. I wanted to know the facts.

R. L. Novy, M.D.: Those were all I was giving to you—the facts.

R. J. HUBBELL, M.D. (Kalamazoo): Perhaps Dr. Sutton could enlarge on just one thing. The recommendation of The Council did not include the 40 per cent increase. Why did you elect to include that in your recommendation?

R. L. Novy, M.D.: I would like to have Dr. Ledwidge answer that.

THE SPEAKER: Dr. Ledwidge was chairman of The Council Committee which considered this before writing the report.

P. L. LEDWIDGE, M.D.: In answering the question which has been asked of me, I would like to give just a little more of the background than has been given here tonight.

It is perfectly true that these things were gone over completely and thoroughly in the Reference Committee. On the other hand, I believe this is a question that is important enough so that every delegate should understand it perhaps a little better than they do now.

In the first place, let's go back to the time when Michigan Medical Service was established. The philosophy behind the establishment of Michigan Medical Service considered really two purposes: First, to do something for the public in the way of supplying health care for what they could afford to pay; second, to do the best we could for the medical profession.

I believe the non-profit organization we have set up has been able to do more for those two groups than any other method that has been considered to date.

First, from the standpoint of the subscriber: Is there any doubt in the mind of any individual here that Michigan Medical Service is more generous to the subscriber than any other type of service that has been offered? Is there any doubt on that point?

Now, from the standpoint of the medical profession: Our organization operates at an administrative overhead of about 12 per cent. I cannot give the average rates of the other groups that furnish service—commercial groups—but it is very, very much higher. Therefore, theoretically, at least, and in practice, I believe, for what the subscriber pays in dollars he gets more service for himself and his family—and certainly the doctor of medicine who takes care of him should get a great percentage of the subscriber's fee paid in. I doubt if there is any company on earth that is paying out 88 per cent of subscribers' premium fees to the doctor. I doubt it.



Now let's go back just a little bit, as Dr. Novy has said, to what our service was set up to perform. It was set up as a service program, in which we would give, after a few months of time—we settled down to hospital service, and we agreed (at least those who participated agreed) to take care of hospital care of these patients for the fee paid by Michigan Medical Service, provided they came within the income limits.

At that time, as has been stated, about 80 per cent of the group came within that limit; now about 20 per cent come within it. In other words, we are acting at the present time, as Dr. Novy said before, as a service organization to about 20 per cent of our total group. For about 80 per cent we are acting as an indemnity company.

Dr. Witter has brought up a very nice point: Would it not be better to keep 80 per cent of our patients as private patients, who would be over the income limit and who would pay us what we feel would be fair and what they think would be fair? Absolutely. It would be better.

Unfortunately, however, we don't have the final say on that. Don't you recall that for at least four or five years there has been a compulsory health insurance plan brought before the Congress of the United States? Don't you recall that in the last Congress the President gave that priority over practically everything else? Why didn't it get farther? It didn't get farther for one reason, I believe, and it is this:

While the large labor groups, such as the United Mine Workers, the UAW-CIO, steel, and so on, are giving lip service to a government program, they don't want it. Why don't they want it? They don't want it right now for this reason: If that goes into effect, the money to pay for it is to come partly from payroll deductions in the form of taxation. They don't want that; they want the worker not to be taxed for this, but to have the employer furnish it.

If they don't get some other type of service plan then they are committed wholeheartedly for government compulsory insurance. I don't think for one minute that government compulsory insurance is the only thing we have to fear, and I don't think for one minute that we are going to stall that indefinitely. We have stalled it for four or five years, and this year it cost our Society approximately \$137,000 to do it. Isn't that right, Mr. Palmer? Approximately \$137,000! We are not going on that way forever. If we do, we are not going to be able to control it.

Besides the government let's think of one or two things: The UAW-CIO and the other CIO organizations are demanding a service organization, and they are going to get it elsewhere—no doubt about it, in my mind, at least—and they are trying to do it in several ways: They are contacting other groups; they are trying to get commercial companies to give them a service contract; they are trying to get certain hospital groups and clinics to give them a service contract. We have no guarantee that some of those groups will not be willing to do it.

Now may I give one word of explanation before I continue on with what I am going to say: The reason I am here, and the reason the report came to The Council as it did, was because last July, at our Council meeting, there was a request to consider some way of servicing these large groups, such as the United Mine Workers. They have a Health Foundation. I thought it was 10 cents a ton, but some of the boys told me today it is 20 cents a ton assessment on each ton of coal. Don't think they haven't the money, and don't think they are not going to buy service—they are!

On that basis, then, this small committee was set up to study this problem. The committee consisted of Dr. Brunk, Dr. Foster and myself, and Dr. Beck, Chairman of The Council, as ex officio. Don't think we were drooling for the job, because it is neither an easy nor a pleasant one. We met with some of these groups, and we found out certain things which we reported to The Council and which are included in the preamble and in the recommendations.

Now, let's go back for one moment to what we are doing: We are servicing about 20 per cent of the people. In other words, about 80 per cent of those who would come under the new group are over-income and therefore are being charged over the Michigan Medical Service fees.

Suppose, for instance, we simply vote this income limit of \$5,000 and say we do no more than we are doing right now. It doesn't make one iota of difference to you or me whether the subscriber is in the \$2,500 or the \$5,000 group—he is going to pay the complete fees under \$2,500. If he is over \$2,500 he is going to pay it anyway. It makes no difference that I can see.

Now, suppose, for instance, that these large companies that are establishing foundations—UAW Mine Workers already have it; steel is demanding it, and the automobile groups are demanding it right now from Ford, and very shortly from Chrysler, no question about it,—suppose they get it, and suppose, because of their income limits in this group (and it is paid on a Foundation basis) we would get 100 per cent enrollment and 100 per cent payment on our fees. Is there any reason why we shouldn't go out and offer that large group that pays well, and hold them, rather than go to some organization that the CIO sets up or some other way?

It seems to me that the present thing can't possibly lose or give any harm as it is offered, and that if this other matter does come to pass we will be in a position to take on business and keep it for our private practitioners, which will be the best type of business. It will take care of the average people with a little better than average income, and it will be 100 per cent fees and 100 per cent collections.

Now I will answer the question asked when I took the privilege of going into this long harangue: The 40 per cent—nobody can set that figure. Dr. Novy has told you some of the things that were used to estimate it. The reason it was put in is this: The original study committee, Dr. Brunk, Dr. Foster and myself, felt that if we came before this group or asked The Council to come

before this group and suggest a \$5,000 income (and that's a lot of money even in these times), this group would want to know something about what they might have reason to expect in changes in fees. Therefore, we did the best we could. We set down what approximately they were charging over income according to the statistics we could get.

Let me carry that a little further: When it was brought before The Council, The Council is pretty wise in studying these things and they deleted the 40 per cent estimate, and just said there would be an increase in fee schedule—and I think they were wise in doing it because nobody could set it.

The Reference Committee then reinstated it so that it would come up here for discussion. I think there would certainly be nobody on our committee, certainly nobody in The Council, certainly nobody in the Reference Committee, who would object to deleting that part from your resolution, and simply saying that we will authorize Michigan Medical Service to make a proper and fair fee adjustment.

THE SPEAKER: What is the pleasure of the House concerning the disposition of this motion? The motion before the House is that the report of The Council, as amended, be approved. I think we understand it completely. Is there any further discussion?

E. D. SPALDING, M.D.: I don't offer this in any antagonistic way at all, but while we are discussing the economics of this matter, and actuarial figures, the suggested rise from \$2,500 to \$5,000 coverage is on the basis of the fact that the dollar has been depreciated 50 per cent. In other words, \$5,000 today buys what \$2,500 bought ten years ago. That is for the patient. Of course, the doctors' dollar is different. The doctors are only going to get a 40 per cent rise instead of a 100 per cent rise.

*The motion was put to a vote and was carried.*

THE SPEAKER: Dr. Sutton, do you have further resolutions to report?

P. E. SUTTON, M.D.: Mr. Speaker, we have no further resolutions.

We move the adoption of this report by the joint committees as a whole.

The motion was severally seconded, was put to a vote, and was carried unanimously.

### XIII—C. REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF STANDING COMMITTEES

J. R. HEIDENREICH, M.D.: This Reference Committee has reviewed the work of all the Standing Committees. It wishes to commend the excellent work of the Committee on Postgraduate Medical Education, particularly its Chairman, H. H. Cummings, M.D., who has carried the load.

The Committee on Preventive Medicine it wishes to commend, and has no suggestions.

The Committee on Rheumatic Fever Control likewise has done a most efficient job, and the Reference Committee wishes to commend it.

The Reference Committee has only a note of commendation to the Cancer Control Committee.

The Maternal Health Committee has done a most efficient job, and we wish to commend it for its good work.

The Venereal Disease Control Committee has given of its time and its effort with good results, and the Reference Committee wishes to commend it.

The report of the Committee on Mental Hygiene has been accepted with the commendation of the Reference Committee, as has been the reports of the Child Welfare Committee and the Committee on Iodized Salt.

The Reference Committee had no suggestion to add to the report of the Committee on Geriatrics except to carry on its good work in this new field.

The Committee on Distribution of Medical Care, at its own suggestion, suggests that other committees that have taken over its work continue to do so.

For the Public Relations Committee, the Reference Committee had only the highest praise, and encourages it to continue to stress the personal contact in the education of the American public. This holds for all its subcommittees—the Committee on Newspapers, the Committee on Radio, and the Committee on Cinema and on Publications.

The Ethics Committee had no meetings, therefore no comment.

The Reference Committee wishes to commend the Legislative Committee for sustained and excellent work, and wishes to suggest that thought be given to the employment of an analyst to watch all bills introduced into the State and national legislature.

It is the feeling of the Reference Committee that the Industrial Health Committee should be reactivated, and suggests that it co-operate with industry and labor and other organizations of similar objectives in an educational program to the profession of the scope of industrial medicine, the hazards the worker is exposed to, and its probable disease effects, and that it study the standard practice as to contracts, salaries, and stipends, and to transmit this information to the membership of the Michigan State Medical Society through the Journal.

The Committee commends the Committee on Scientific Work for the excellent program of the annual session.

Mr. Speaker, I move that this report be approved as read.

R. A. SPRINGER, M.D.: I second the motion.

The motion was put to a vote and was carried.



### XIII—d. THE REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF SPECIAL COMMITTEES

G. T. McKEAN, M.D. (Wayne):

1. *We recommend that the report of the State Veterans Affairs Committee be accepted and that the Committee be discharged.*

*I move that the House approval be given to this recommendation.*

E. C. TEXTER, M.D. (Wayne): *Second the motion. The motion was put to a vote and was carried.*

G. T. McKEAN, M.D.: *We recommend that the report of the State Interprofessional Committee be accepted and that this Committee be discharged.*

*I move this recommendation be approved by the House of Delegates.*

R. V. WALKER, M.D. (Wayne): *Second. The motion was put to a vote and was carried.*

G. T. McKEAN, M.D.: We have a series of four recommendations which require no special comment:

We recommend that the report of the Beaumont Memorial Committee be accepted.

We recommend that the report of the Scientific Radio Committee be accepted with commendation for its efforts, and that this Committee continue its activities.

We recommend that the report of the Advisory Committee to the Woman's Auxiliary be accepted.

We recommend that the report of the Liaison Committee to Medical Assistants Society be accepted.

*I move that the House of Delegates accept this report of the Reference Committee.*

E. C. TEXTER, M.D.: *Second the motion. The motion was put to a vote and was carried.*

G. T. McKEAN, M.D.: Your Reference Committee recommends that the report of the Advisory Committee to the National Foundation for Infantile Paralysis be approved with the following change of its first recommendation: We recommend that this paragraph be worded: "That the local Chapters be advised to use their funds to supplement the available private means of the individual afflicted with Infantile Paralysis." (see Page 1513)

Mr. Chairman, I move that the House of Delegates accept this recommendation of the Committee.

DOUGLAS DONALD, M.D.: *Second the motion. The motion was put to a vote and was carried.*

G. T. McKEAN, M.D.: We recommend that the report of the Committee on Increase of Medical Students be accepted, and it is recommended that this problem be given further study.

We recommend that the report of the Committee of Six to Study Basic Science Act and Medical Practice Act be accepted and it is recommended that this Committee be instructed to continue its efforts to have the Medical Practice Act and Basic Science Act amended. It is appreciated how much work has been done by this Committee, and it is to be commended.

We recommend that the annual report of the Permanent Conference Committee with Michigan Hospital Association and Michigan Nursing Center Association be accepted.

We recommend that the report of the Liaison Committee with Michigan State Pharmaceutical Association be accepted.

We recommend that the report of the Liaison Committee with Michigan Hospital Association be accepted.

Mr. Chairman, I move that the House of Delegates accept this report in toto.

E. C. TEXTER, M.D.: *I second the motion. The motion was put to a vote and was carried.*

### XIII—e. THE REPORT OF THE REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

C. K. HASLEY, M.D.: Mr. Chairman and members of the House of Delegates: The Reference Committee on Constitution and Bylaws unanimously approved the resolutions that were introduced to amend the Bylaws this afternoon. I will take them up in order.

#### XIII—e—1. Bylaws Ch. 8—Sec. 2.

"Whereas, according to the Constitution (Article IX, Section 1) a Vice Speaker of the House of Delegates is one of the six Officers of the Society, aside from the Councilors, and

"Whereas, according to the Bylaws (Chapter 8, Section 2), 'Officers of this Society shall be ex officio members of the House of Delegates, and with the exception of the Speaker of the House of Delegates shall be without power to vote in the House of Delegates,' and

"Whereas, such a Vice Speaker as well as the Speaker are both duly elected delegates representing their County Societies, in contradistinction to the other four Officers, and as such obviously should not be disfranchised; therefore, be it

"RESOLVED: That the Bylaws (Chapter 8, Section

2) be amended by the insertion of the words 'and Vice Speaker' immediately after the word 'Speaker' in this Section."

Chapter 8, Section 2 will then read as follows:

"Officers of this State Society and members of The Council shall be ex officio members of the House of Delegates, and, with the exception of the Speaker and Vice Speaker," and so on.

Mr. Chairman, I move the adoption of this part of the report.

DOUGLAS DONALD, M.D.: *Second. The motion was put to a vote and was carried.*

#### XIII—e—2 By-laws (Ch. 9.—Sec. 12)

C. K. HASLEY, M.D.: "Whereas, according to its authority in the By-laws (Chapter 8, Sec. 3), the 1948 House of Delegates subdivided the 1st and 16th Councilor Districts (constituting Wayne County) to create two additional Districts, the 17th and 18th respectively, but did not specifically designate the boundaries of such, and

"Whereas, the local conditions in Wayne County are different from those in other Councilor Districts, it being a large metropolitan area; therefore it is desirable to have the four Councilors representing this area selected at large, and not one from each of four permanently defined districts. In this way the ablest men available in the whole area may be selected, irrespective of their location in the County; and

"Whereas, it is advisable to have this special procedure definitely set forth in the By-laws to avoid any future ambiguity; therefore, be it

"RESOLVED: That the By-laws (Chapter 9, Section 12) be amended by adding to this Section the sentence, 'Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County,' and that the '17th District—Wayne' and '18th District—Wayne' be added to the Councilor Districts listed in this Section."

Chapter 9, Section 12 then will read as follows:

"The following County Societies shall constitute the Councilor Districts of the State. Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County. 1st District—Wayne," and so on; "16th District—Wayne; 17th District—Wayne; 18th District—Wayne."

Mr. Chairman, I move the adoption of this part of the report.

T. P. WICKLIFFE, M.D. (Houghton-Baraga-Keeweenaw): *I second the motion.*

The motion was put to a vote and was carried.

#### XIII—e—3 By-laws (Ch. 5—Sec. 3-g)

C. K. HASLEY, M.D.: "Whereas, there are some Active Members who are desirous of retaining their membership in the Michigan State Medical Society while pursuing postgraduate work, and it is deemed advisable that such members be exempt from the payment of membership dues and shall be classified as Associate Members for the term of their postgraduate work; therefore, be it

"RESOLVED: That paragraph (g) be added to Chapter 5, Section 3 of the By-laws, to read as follows:

"(g) An Active Member, by transfer, for the period of one year while he is temporarily out of practice on account of postgraduate medical studies. This may be renewed upon petition to The Council at its discretion."

Chapter 5, Section 3 then will have the additional paragraph (g) which will read as follows:

"(f) An Active Member," and so on.

"(g) An Active Member, by transfer, for the period of one year while he is temporarily out of practice on account of postgraduate medical studies. This may be renewed upon petition to The Council at its discretion."

Mr. Speaker, I move the adoption of this resolution.

R. W. TEED, M.D.: *Seconded. The motion was put to a vote and was carried.*

C. K. HASLEY, M.D.: Mr. Chairman, I now move the adoption of this report as a whole.

C. S. CLARKE, M.D. (Jackson): *Second.*

The motion was put to a vote and was carried.



### XIII—f. THE REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

B. M. HARRIS, M.D.: We have only one resolution to consider.

#### 1. RESOLUTION RE PROPOSED REORGANIZATION OF AMA

"RESOLVED: That the necessary assistance to the leadership in the American Medical Association be provided by action of the House of Delegates of the American Medical Association, creating an Executive Vice President (not necessarily a Doctor of Medicine), assisted by a group of highly trained technical advisers in such fields as economics, public relations, government, political economy, medical education, medical distribution, and others; and be it further

"RESOLVED: That the Michigan delegates to the American Medical Association be instructed by this House of Delegates of the Michigan State Medical Society to present this resolution to the House of Delegates of the American Medical Association; and be it further

"RESOLVED: That all necessary measures be taken to inform other state societies of the wide purposes and intent of this resolution, and that before the next interim meeting, so that favorable support to this resolution may be effected."

Your Committee approves the principle involved, and recommends that this resolution be referred to The Council of the Michigan State Medical Society for Study, with power to act as they deem advisable prior to the interim meeting of the House of Delegates of the American Medical Association in December, 1949.

Mr. Speaker, I move the adoption of the Reference Committee's report.

R. E. DUSTIN, M.D. (Lenawee): Second the motion. After discussion the motion was put to a vote and was carried.

B. M. HARRIS, M.D.: Mr. Speaker, I move the adoption of the report of the Reference Committee as a whole.

H. W. WILEY, M.D. (Ingham): I second the motion. The motion was put to a vote and was carried.

### XIII—g. THE REPORT OF THE REFERENCE COMMITTEE ON SPECIAL MEMBERSHIPS

B. T. MONTGOMERY (Chippewa-Mackinac): This is the list of names which I wish to read to you as being submitted by the respective County Societies for Life Memberships:

Name	City
1. A. Benjamin Armsbury, M.D.	Marine City
2. Jay J. Brownson, M.D.	Kingsley
3. John E. Cooper, M.D.	Battle Creek
4. Mortimer E. Danforth, M.D.	Detroit
5. A. James DeNike, M.D.	Detroit
6. Robert L. Dixon, M.D.	Caro
7. Wilkie M. Drake, M.D.	Breckenridge
8. Clarence J. Durham, M.D.	Muskegon
9. Charles T. Eckerman, M.D.	Muskegon
10. C. W. Ellis, M.D.	West Olive
11. John W. Evers, M.D.	Flint
12. George A. Ford, M.D.	Detroit
13. I. S. Gellert, M.D.	Detroit
14. Joseph W. Gething, M.D.	Battle Creek
15. Margery J. Gilfillan, M.D.	Battle Creek
16. William A. Grant, M.D.	Millford
17. Burt Francis Green, M.D.	Hillsdale
18. Raymond S. Halligan, M.D.	Flint
19. Arthur F. Harrington, M.D.	Muskegon
20. William H. Honor, M.D.	Wyandotte
21. George B. Hoops, M.D.	Detroit
22. Aura A. Hoyt, M.D.	Battle Creek
23. Gottlieb H. Kaven, M.D.	Unionville
24. William E. Keane, M.D.	Detroit
25. Frederick C. Kidner, M.D.	Detroit
26. George L. Koessler, M.D.	Detroit
27. Harry B. Kyselka, M.D.	Traverse City
28. Martha L. Longstreet, M.D.	Saginaw
29. C. A. Mitchell, M.D.	Benton Harbor
30. L. W. Oliphant, M.D.	Ann Arbor
31. William R. Olmstead, M.D.	Detroit
32. John Walter Orr, M.D.	Flint
33. E. S. Sevensma, M.D.	Grand Rapids
34. G. J. Stuart, M.D.	Grand Rapids
35. George W. Trumble, M.D.	Flint

36. E. R. VanderSlice, M.D.	Lansing
37. Otto Von Renner, M.D.	Vassar
38. Pitt S. Wilson, M.D.	Muskegon
39. Frank C. Witter, M.D.	Detroit

The following names have been submitted for *Emeritus Memberships*

Name	City
1. Jacob H. Burley, M.D.*	Port Huron
2. T. E. DeGurse, M.D.*	Marine City
3. Guy Henry Frace, M.D.	St. Johns
4. Walter D. Ford, M.D.	Detroit
5. Louis J. Hirschman, M.D.	Detroit
6. Willard Monfort, M.D.	Detroit
7. Dean W. Myers, M.D.	Ann Arbor
8. Robert J. Palmer, M.D.	Detroit
9. George Waters, M.D.*	Port Huron
10. William G. Wight, M.D.	Yale
11. W. J. Wright, M.D.	Ypsilanti

\*Deceased

Your Reference Committee recommends the acceptance of these memberships, and I so move.

The motion was severally seconded, was put to a vote, and was carried.

B. T. MONTGOMERY, M.D.: The following names have been submitted for *Retired Memberships*:

1. Lewis M. Carey, M.D.	Port Huron
2. Bertha Ellis, M.D.	West Olive
3. Newton H. Greenman, M.D.	Decatur
4. Arthur C. Henthorn, M.D.	St. Johns
5. H. R. Meyer, M.D.	Lansing
6. R. E. Scrafford, M.D.	Bay City
7. R. N. Sherman, M.D.	Bay City
8. M. E. Vroman, M.D.	Port Huron

Your Reference Committee recommends the granting of these Retired Memberships, and I so move.

The motion was severally seconded, was put to a vote, and was carried.

The following names are those which have been submitted for *Associate Memberships*:

Edward R. Doezeema, M.D.	Grand Rapids
Marshall J. Feeley, M.D.	Detroit
H. H. Haight, M.D.	Crystal Falls

The following are from Ann Arbor:

Charles W. Aldridge, M.D.	Jack Lapides, M.D.
George N. Aldredge, M.D.	Manuel Levin, M.D.
Arthur W. Allen, M.D.	Robert E. Lloyd, M.D.
William C. Anderson, M.D.	Charles S. Lueth, M.D.
Edwin V. Banta, Jr., M.D.	Ralph D. Mahon, M.D.
Gerhard H. Bauer, M.D.	John E. Maley, M.D.
Edwin G. Bovill, Jr., M.D.	John S. Marshall, M.D.
Harold L. Boyer, M.D.	Kenneth P. Mathews, M.D.
Henry C. Bryant, M.D.	Richard W. Mills, M.D.
William J. Butler, M.D.	Benjamin Moorstein, M.D.
William D. Cheney, M.D.	Merle M. Musselman, M.D.
Donald R. Cooper, M.D.	Sylvester J. O'Connor, M.D.
James E. Coyle, M.D.	William I. Owens, M.D.
William R. Craig, Jr., M.D.	Max H. Parrott, M.D.
L. Reed Cranmer, M.D.	Robert A. Peelor, M.D.
Charles A. Crockett, M.D.	Stanley T. Rolfson, Ph.D.
Arthur M. Dalton, M.D.	George L. Schaiberger, M.D.
William J. Feicks, M.D.	Henry K. Schoch, Jr., M.D.
Robert G. Fish, M.D.	Hyman D. Shapiro, M.D.
Marshall L. Follo, M.D.	Philip W. Smith, M.D.
John K. Fulton, M.D.	Wayne H. Stewart, M.D.
Thomas P. Glynn, M.D.	Robert M. Stow, M.D.
Philip D. Gordy, M.D.	John W. Strayer, M.D.
Arthur E. Gorlick, M.D.	Neil H. Sullenberger, M.D.
Jack R. Gustafson, M.D.	George D. Taylor, M.D.
William D. Harrelson, M.D.	Alden S. Thompson, M.D.
Walter G. Hunsberger, M.D.	Daniel C. Thomson, M.D.
Raymond S. Jackson, M.D. ☛	Arthur C. Tompsett, Jr., M.D.
Payton Jacob, M.D.	Arthur H. Ulmer, M.D.
Robert H. Juzek, M.D.	William F. Weeks, M.D.
Robert D. Kiess, M.D.	Arnold Wollum, M.D.
Walter G. King, M.D.	

Your Reference Committee recommends the granting of these Associate Memberships, and I so move.

The motion was severally seconded, put to vote, and was carried.

B. T. MONTGOMERY, M.D.: Non-Resident Membership: I. J. Beebe, M.D., Lenawee County.



This has been certified by the State Society. The Constitution requires that in order to become a non-resident member the person must be a resident member in the County in which he is practicing. Since Dr. Beebe was certified by our State office to be eligible, we assume he is a member of his own County Society, and we therefore recommend that this membership be granted. I so move.

C. L. WESTON, M.D.: I second the motion.  
The motion was put to a vote and was carried.

B. T. MONTGOMERY, M.D.: Mr. Speaker, I move the adoption of the report as a whole.

The motion was severally seconded, was put to a vote, and was carried.

(The meeting recessed at eleven-fifteen o'clock.)

## TUESDAY MORNING SESSION

September 20, 1949

The meeting reconvened at nine-forty-five o'clock, Speaker J. S. DeTar, M.D., presiding. The House went into Executive Session.

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THE SPEAKER: If there is no objection, the Chair will declare that the House will resume the regular session and will be out of Executive Session.

### XIII—h. THE REPORT OF THE REFERENCE COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

#### 1. Relation between Medical Staffs and Hospital Management

L. W. DAY, M.D.: Mr. Speaker, the Reference Committee on Public Relations had one resolution presented to it, and before we were able to act upon it Dr. Fenton, who presented this resolution for our action, appeared before the Committee and asked that his resolution be withdrawn. Therefore no action was taken.

C. J. BARONE, M.D.: I move the report of the Committee be accepted.

The motion was severally seconded, was put to a vote, and was carried.

### XIII—i. THE REPORT OF THE REFERENCE COMMITTEE ON HYGIENE AND PUBLIC HEALTH

O. K. ENGELKE, M.D.: The original resolution that was referred to the Committee on Hygiene and Public Health by Dr. Armstrong was as follows:

#### 1. Uniform Policy in Polio Cases

"Whereas, the local chapters of the National Foundation for Infantile Paralysis pay only part of the cost of polio care, and

"Whereas, good public relations demand a uniform State policy either for full payment or for assistance with Michigan Crippled Children Commission funds; therefore, be it

"RESOLVED: That the Michigan State Medical Society House of Delegates request the Medical Advisory Committee to the National Foundation for Infantile Paralysis to promote the establishment of such uniform policy for financial assistance to polio cases."

The following resolution was offered by the Reference Committee:

"Whereas, the local chapters of the National Foundation for Infantile Paralysis apparently have no uniform policy for the use of their funds, and

"Whereas, confusion and misunderstanding have arisen because of these apparent differences of policy, particularly in regard to payment for medical and hospital care; therefore, be it

"RESOLVED: That the Michigan State Medical Society House of Delegates request the Medical Advisory Committee to the National Foundation for Infantile Paralysis to explore, during the ensuing year, the possibility of securing more uniform local chapter policies for financial assistance to polio cases, and to report to the House of Delegates session in 1950." (see Page 1514)

Mr. Speaker, I move the adoption of this resolution.

R. W. TEED, M.D.: Second.

The motion was put to a vote and was carried.

O. K. ENGELKE, M.D.: Mr. Speaker, that is the end of the report. I move the adoption of the whole report of this Reference Committee.

R. A. SPRINGER, M.D.: Second.

The motion was put to a vote and was carried.

### XIII—j. REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

C. W. COLWELL, M.D. (Genesee): Mr. Speaker and members of the House of Delegates, this statement handed to our Reference Committee concerning the tribute to the late Dr. T. K. Gruber has been amended by our Committee, merely for typographical errors.

#### 1. Testimonial to the late T. K. Gruber, M.D.

"Whereas, the House of Delegates of the Michigan State Medical Society in the death of Thomas K. Gruber have lost an efficient and successful worker for the best ideals of the medical profession, and

"Whereas, Dr. Gruber was one who made a tremendous contribution at the County, State and national level, and

"Whereas, he represented this body as a delegate to the American Medical Association for more than eleven years, and

"Whereas, we are charged with the heavy duty of continuing the effort with now his courage and example instead of his always cheerful and charming presence, and

"Whereas, work for the improvement of the profession is too often thankless and barren of marks of accolades; therefore, be it

"RESOLVED: That we hereby honor his memory with the above statements, and the delegates of this 84th meeting of the House adopt this tribute as a token of our esteem and approbation; and be it further

"RESOLVED: That this resolution be spread upon the minutes, and a suitably embossed copy be presented to his widow as an expression of our loss."

I move, Mr. Speaker, that this be adopted.

The motion was severally seconded, was put to a vote, and was carried unanimously.

#### 2. Report of Commission on Health Care

C. W. COLWELL, M.D.: Your Reference Committee on Miscellaneous Business recommends the adoption of the report of the Commission on Health Care, with the deletion of the last paragraph, which reads as follows:

"Through the studies and observations of your Commission on Health Care, we believe we can state unequivocally that the broad base of the pyramid upon which health care in America should rest will not be as stable as it could be if an Executive Vice President of outstanding potentialities, together with a strong cabinet of specialists in the fields of economics, of science, of law, education distribution and public relations, are not provided to assist the officers and Trustees of the American Medical Association in their very great responsibilities, which burden without adequate assistance they have borne voluntarily through the years."

Your Reference Committee feels that the subject matter covered in the above paragraph was considered in a resolution referred to another committee.

I move, Mr. Speaker, that this be adopted.

The motion was seconded, put to a vote, and was carried.

C. W. COLWELL, M.D.: I move the adoption of the report of the Reference Committee as a whole.

O. K. ENGELKE, M.D.: Second.

The motion was put to a vote and was carried.

### XIII—b. REFERENCE REPORTS ON REPORTS OF THE COUNCIL

#### 2. Dispensing of Eyeglasses

P. E. SUTTON, M.D.: The Reference Committee has reconsidered The Council's recommendation that the House of Delegates give study to clarify the conflict between the American Medical Association interpretation and the 1948 Michigan State Medical Society House of Delegates resolution on the subject of dispensing of eyeglasses.

The Reference Committee recommends that the wording be changed to read that the House of Delegates give study to clarify the conflict between the AMA Code of Ethics, as contained in Section 6 of the AMA Code of Ethics, and the resolution passed by the 1948 Michigan



State Medical Society House of Delegates on the subject of rebates and dispensing of eyeglasses.

It is the opinion unanimously of the Reference Committee that this House of Delegates intends and believes in and subscribes to conforming with the AMA Code. Without questioning the upright intentions of this House of Delegates in passing a resolution at its annual meeting in 1948 in direct conflict with this Code, this Reference Committee does not see how it can do otherwise than to recommend the adoption of The Council's recommendation and add its own recommendation of subscribing and conforming to the AMA Code.

For the purpose of clarification for those of you who have not read either of these Articles which appear in conflict, I shall read these two Articles. Section 6 of the AMA Code of Ethics has to do with patents, commissions, rebates and secret remedies.

Section 6: "An ethical physician will not receive remuneration from patents on or the sale of surgical instruments, appliances and medicines, nor profit from a copyright on methods of procedure. The receipt of remuneration from patents or copyrights tempts the owners thereof to retard or inhibit research or to restrict the benefits derivable therefrom to patients, the public, or the medical profession.

"The acceptance of rebates on prescriptions or appliances, or of commissions from attendants who aid in the care of patients, is unethical. An ethical physician does not engage in barter or trade in the appliances, devices or remedies prescribed for patients, but limits the sources of his professional income to professional services rendered the patient. He should receive his remuneration for professional services rendered only in the amount of his fee, specifically announced to his patient at the time the service is rendered, or in the form of a subsequent statement, and he should not accept additional compensation secretly or openly, directly or indirectly, from any other source.

"The prescription or dispensing by a physician of secret medicines or other secret remedial agents, of which he does not know the composition or the manufacture or promotion of their use, is unethical."

That is Section 6 of the Code of Ethics of the American Medical Association.

Let me now read to you the resolution passed in 1948 by this House of Delegates.

"Whereas, we propose to continue to conduct the practice of medicine according to the experience and judgment of a responsible medical profession working from the scientific, sociological and economic angles, according to plans based on experience, to increase the distribution of good care, and

"Whereas, the Michigan State Medical Society is in the habit of looking at its problems squarely, fearlessly, honestly, and by analysis, and

"Whereas, after analysis, to approach new methods as scientific men should, by planning and experimentation, knowing that the complicated subject of economics in any segment of medicine cannot suddenly be changed by a single formula or law, and

"Whereas, according to the principles of medical ethics it is unprofessional to accept rebates on prescriptions, appliances or perquisites from attendants who aid in the care of patients, we believe it will be the consensus of the House of Delegates that the membership of the Michigan State Medical Society and of the medical profession in general is as honest and as much to be trusted in all of its responsibilities as any other group of citizens, therefore be it

"RESOLVED: That it is the consensus of this House of Delegates that the ophthalmologist's responsibility for glasses as a therapeutic agent is a medical problem, not to be separated from the eye examination.

"That we urge that the ophthalmologists accept the responsibility involved in the proper merchandising of glasses to their patients."

Mr. Speaker, the Reference Committee moves the adoption of the recommendation of The Council, with the addition of the

Reference Committee's recommendation of subscribing to and conforming to the AMA Code.

THE SPEAKER: Dr. Sutton, would you read again, then, what you are moving? You are moving the adoption of the recommendation of The Council. Would you read again the recommendation of The Council?

P. E. SUTTON, M.D.: We have changed the wording of the recommendation of The Council, and this is the wording we would like to have adopted:

"That the House of Delegates be instructed to give study to clarify the conflict between the AMA Code of Ethics as contained in Section 6 of the AMA Code of Ethics, and the resolution passed by the 1948 Michigan State Medical Society House of Delegates on the subject of rebates and dispensing of eyeglasses," with the addition of the recommendation of the Reference Committee that we subscribe to and conform to the AMA Code.

I have already made the motion, and will repeat that we move the adoption of this recommendation as added to by our Reference Committee and as just now read.

THE SPEAKER: The motion has been made and seconded, and is now open for discussion. The motion is that the House of Delegates make a study (which has been done already by this Committee), and that the House of Delegates subscribe to the ethical principles laid down by the American Medical Association in this matter.

After full discussion P. L. Ledwidge, M.D., offered the following substitute motion:

"That it is the consensus of opinion of this House that no conflict exists between the AMA Code of Ethics and the resolution passed by this House last year."

*The motion was severally seconded.*

THE SPEAKER: The substitute motion is to the effect that there is no conflict between the resolution passed by this House last year and the AMA Code of Ethics.

*The vote is 65 to 21, and the motion is passed.* We are therefore agreeing that there is no conflict between the resolution and the AMA Code of Ethics.

L. W. Christian, M.D.: I move that this whole matter be referred to the Judicial Council of the American Medical Association for interpretation.

E. C. TEXTER, M.D.: I support that motion.

*The motion was put to a vote and was carried by a vote of 65 to 22.*

P. E. SUTTON, M.D.: I move that the report in toto be adopted.

R. A. SPRINGER, M.D.: Second the motion.

*The motion was put to a vote and was carried.*

### XIII—c. REPORT OF THE REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

C. K. HASLEY, M.D.: Mr. Speaker and members of the House, the supplementary report consists of two parts. First there is a petition; second, there is a resolution. I will read the petition:

#### 4. Petition to Create 19th Councilor District

"Genesee County has become one of the large component parts of the Michigan State Medical Society, and under the present organization there are times, covering a period of five or more years, when its Councilor does not live within the boundaries of the County, but in some other part of the District.

"Flint, being the second largest automobile manufacturing center in the World, has developed a situation where its problems of public relations with the laboring class is quite different from that of rural or less industrialized areas, and requires close contact with our State officers at all times. A local Councilor who understands our mutual problems could best serve our interests and those of the State Medical Society in its effort to maintain the best of relations with the public.

"Therefore, the Genesee County Medical Society hereby petitions the House of Delegates of the Michigan State Medical Society to set aside the entire County of Genesee as the 19th District, with a Councilor of its own."

The resolution reads as follows:

#### 5. Survey of MSMS Councilor Districts

"Whereas, it is apparent from time to time that certain of the larger county medical societies are not represented on The Council nor in direct contact with the officers of the State Medical Society, and



"Whereas, we believe a more cohesive working unit could be secured by having every large county unit represented on The Council at all times, and

"Whereas, this cannot now be accomplished and still maintain adequate representation from the less populous areas; therefore, be it

"RESOLVED: That a special committee be appointed to study the possible regrouping of counties in Councilor Districts, to attain better representation of the larger societies, and report their findings at next year's House of Delegates."

The Reference Committee met and felt there was a little bit of confusion. We have a petition which asks that we immediately set up another Councilor District. The resolution, in turn, comes in and asks that a committee be appointed to study it.

The Reference Committee feels that it is neither the right time nor is it suitable to take these things into consideration, and they have therefore drafted this report:

"Your Reference Committee on Constitution and By-laws has carefully considered the petition and resolution which were introduced by the Genesee delegates. After due and deliberate study with Councilors and consultants, the Committee feels that the problems which confront the Genesee members should be solved locally. The Reference Committee recommends that the petition be not granted, and that the resolution be not approved."

THE SPEAKER: You have heard the recommendation of the Reference Committee.

R. W. TEED, M.D.: I second the motion.

THE SPEAKER: This is not a motion—this is simply a recommendation. Therefore, the Chair will consider that the resolution is on the floor for discussion. The resolution is to the effect that a special committee be appointed to study the regrouping.

Is there any discussion?

C. W. COLWELL, M.D.: Do I take it that you will take up the petition at a later date, after this is settled?

THE SPEAKER: I think the petition ought to be studied with the resolution.

C. W. COLWELL, M.D.: A point of order. Would the petition take preference over the resolution, inasmuch as it was presented first?

THE SPEAKER: The petition does not have status as a motion on the floor. The petition was simply sent along with the resolution, which constitutes a motion. No action is justified on the petition, unless someone from the floor makes a motion on either the petition or the resolution.

As it stands now, there is a resolution before the House for adoption or refusal, and that is to set up a committee to study it.

C. W. COLWELL, M.D.: It was our intent that the petition and the resolution should be considered separately when submitted. I raise that as a point of order.

THE SPEAKER: If that is the desire of those who made the resolution and the petition, then let's consider them separately. The Chair will declare that at the present time we are discussing the resolution. If the presenter of the petition cares to discuss that after the resolution, the Chair will open that after the resolution.

C. W. COLWELL, M.D.: Discuss the petition separately from the resolution?

THE SPEAKER: That is right. Let's discuss the resolution, which is to the effect that a special committee be set up to study a regrouping, with the idea of giving Genesee better representation. The motion is before the House. Is there any further discussion on whether or not to set up a committee to study it? If not—

E. D. SPALDING, M.D.: I would like to have the Chairman of the Reference Committee read the recommendation of his Reference Committee again.

C. K. HASLEY, M.D.: The recommendation of the Committee is that the resolution be not approved.

THE SPEAKER: That is the recommendation of the Reference Committee. The Chair will therefore call for a vote, asking for all those who are in favor of the resolution to vote "yes," and all those opposed to vote "no." If you follow along with the Reference Committee, you will vote "no." They recommend a "no" vote. Is there further discussion on the resolution? If you vote "yes" you are in favor of appointing a committee to study it.

R. J. ARMSTRONG, M.D.: Does the resolution call for a study of regrouping over the State?

THE SPEAKER: Will you read that part of it, Dr. Hasley?

C. K. HASLEY, M.D.: No, the resolution does not call for restudying over the State. It calls just for the restudying of the situation in Genesee County.

If I may make a couple of remarks: If we establish a precedent like this, we are immediately going to have to consider the fact that Kent County has five delegates and would be entitled to another Councilor; Oakland County, with five delegates, would likewise come along and ask for another Councilor; Washtenaw County would do the same thing with its five delegates; Genesee has four delegates, and in addition to that it has 208 members. Clinton and Shiawassee would have one Councilor for approximately fifty or sixty members, with two delegates. Genesee would have a Councilor with four delegates.

C. W. COLWELL, M.D.: Mr. Speaker, I am slightly confused; however, it is our intention to have this petition taken up and discussed separately.

THE SPEAKER: That is right.

C. W. COLWELL, M.D.: The resolution, which I understand you are taking up first, was merely our way of trying to straighten out something of this nature in the future.

THE SPEAKER: There is a motion before the House. If the House would prefer to discuss the petition first, you may lay the resolution on the table and go ahead with the discussion of the petition. Right now the vote before the House is whether to pass the resolution asking for a commission to study this.

R. S. BREAKKEY, M.D.: The question was asked as to whether this resolution considered a study of regrouping throughout the State. I was a member of the Resolutions Committee, and it did suggest a study throughout the State. It did not pertain to Genesee County alone. It pertained to Genesee County, but the petition referred to State-wide distribution. There should be no confusion between the two. They are separate.

C. K. HASLEY, M.D.: In order to clarify this, I will read the resolution in its entirety:

"Whereas, it is apparent from time to time that certain of the larger county medical societies are not represented on The Council nor in direct contact with the officers of the State Medical Society, and

"Whereas, we believe a more cohesive working unit could be secured by having every large county unit represented on The Council at all times, and

"Whereas, this cannot now be accomplished and still maintain adequate representation from the less populous areas; therefore, be it

"RESOLVED: That a special committee be appointed to study the possible regrouping of counties in Councilor Districts, to attain better representation of the larger societies, and report their findings at next year's House of Delegates."

THE SPEAKER: That is a general term—a special regrouping of counties in Councilor Districts. Is there further discussion?

W. S. REVENO, M.D.: What is the Committee's recommendation on that?

C. K. HASLEY, M.D.: The Committee's recommendation is that they should not be granted at the present time.

W. S. REVENO, M.D.: We are voting on the Committee's recommendation. A "yes" vote means "no."

THE SPEAKER: No, we are not. We have accepted the recommendation of the Committee. That is not a motion. We are voting on the original motion, to establish a committee to study. We have simply heard the recommendation of the Committee. If you side with the Committee, vote "no." If you are in favor of a committee to study the regrouping of county societies and Councilor Districts, vote "yes." Is there any further discussion?

If not, all in favor say "aye"; opposed, "no." I think we will have to have a division. All in favor please arise. This is a vote in favor of appointing a committee to study the regrouping of Councilor Districts.

All those opposed to the motion, please arise. This means that you are siding with the Committee and you are not in favor of appointing a study committee.

The vote is 29 in favor and 51 opposed. The motion is lost and the resolution is lost. (See Page 1527)

Do you have a further report, Dr. Hasley?

C. K. HASLEY, M.D.: We have the petition.

THE SPEAKER: Dr. Hasley will report on the petition. The petition was sent to his Committee, and it is the duty of the Committee to report back.

C. K. HASLEY, M.D.: The Reference Committee recommends that the petition be not granted.

THE SPEAKER: The petition is for Genesee County—will you repeat that again, so we will know?

C. K. HASLEY, M.D.: The petition would mean that Genesee County thereby petitions the House of Delegates of the Michigan State Medical Society to set aside its entire County of Genesee as the 19th District, with a Councilor of its own.

THE SPEAKER: You have heard the petition. Dr. Hasley has reported the recommendation of the Reference Committee as being not in favor of granting the petition.

E. D. SPALDING, M.D.: Mr. Chairman, I move you that the petition be not granted.

P. E. SUTTON, M.D.: Second the motion.

C. K. COLWELL, M.D.: For the purpose of the record, Mr. Speaker, and on behalf of our present Councilor, I would like to say a few words.

I would like to thank the Committee for allowing us to appear before them. They were very gracious indeed. At the same time, perhaps they don't understand our problems. We feel, as I believe other large industrial metropolitan areas do, that our problems cannot be properly brought before the Michigan State Medical Society unless the Councilor lives within that particular District.

We have an excellent Councilor; I hope he is here. Unfortunately for us, he does not live within our home town, and we don't believe he can see our problems. It is physically impossible for him



to spend enough time in our hospitals to see those problems as he would like to see them.

Last year another county asked for two delegates, and we feel that they did that so that they could better become acquainted with the problems of the Michigan State Medical Society.

**THE SPEAKER:** Is there any further discussion on the motion?

**E. D. SPALDING, M.D.:** Mr. Chairman, it is perfectly possible for Flint to have all the representation it wants, by selecting a Councilor who lives more centrally located and not twenty miles to the west.

**C. W. COLWELL, M.D.:** One more word, Mr. Speaker: That is perfectly possible in the future, but at the present time it is not possible, and we do not wish to do away with our Councilor at the present time. The other large metropolitan areas, we have been informed, feel exactly the same as we do, except that at the present time they do have a Councilor within the confines of their own home town, shall we say. We are the ones who are affected at the present time, and that is the reason why we are asking for this Councilor and the 19th District.

**THE SPEAKER:** The motion is that the petition be not granted. Any further discussion? If not, all in favor of the motion that the petition be not granted—in other words, if you vote “yes” you are in favor of not granting this petition—say “aye.” Opposed, “no.” The motion is passed and the petition is not granted.

**C. K. HASLEY, M.D.:** I move the adoption of the report as a whole.

The motion was severally seconded, was put to a vote, and was carried.

(The meeting recessed at twelve o'clock noon.)

## TUESDAY EVENING SESSION

September 20, 1949

The meeting reconvened at eight-thirty o'clock, Dr. J. S. DeTar, Speaker of the House, presiding:

### XIII—e. REPORT OF REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

#### 5. Survey of MSMS Councilor Districts.

**R. S. BREAKEY, M.D.:** Having voted on the negation concerning this, I move that the resolution be reconsidered.

**W. S. REVENO, M.D.:** I second the motion.

**THE SPEAKER:** It has been moved and seconded that the resolution be reconsidered. The Chair will ask the Secretary, who is in possession of the motion, to come to the microphone and read the resolution which is under reconsideration.

**SECRETARY FOSTER:** The resolution as presented from the Genesee County Medical Society through its delegate, F. W. Baske, M.D., is as follows:

“Whereas, it is apparent from time to time that certain of the larger county medical societies are not represented on The Council nor in direct contact with the officers of the State Medical Society, and

“Whereas, we believe a more cohesive working unit could be secured by having every large county unit represented on The Council at all times, and

“Whereas, this cannot now be accomplished and still maintain adequate representation from the less populous areas; therefore, be it

“RESOLVED: That a special committee be appointed to study the possible regrouping of counties in Councilor Districts to attain better representation of the larger societies, and report their findings at next year's House of Delegates.”

**THE SPEAKER:** Is there any discussion on the motion to reconsider the resolution? We are debating whether to reconsider the resolution.

The Chair is in doubt. Will the Secretary please announce the vote?

Those in favor of reconsideration, say “aye”; opposed, “no.”

**SECRETARY FOSTER:** 41 to 38.

**THE SPEAKER:** Forty-one are in favor of reconsideration and thirty-eight are opposed. The question is now open for reconsideration, and the motion before the House is the resolution.

The resolution before the House is whether or not we shall appoint a committee (that will be a Council committee) to study regrouping of counties and Councilor Districts to attain better representation of the larger societies, and to report their findings at next year's House of Delegates.

The motion was put to a vote and was carried.

## XIV. ELECTION OF OFFICERS

### XIV—a. COUNCILOR 14th DISTRICT

First is the election of a Councilor for the Fourteenth District. Dr. Dean W. Myers of Ann Arbor is the incumbent in the Fourteenth District. The Chair will open nominations for Councilor of the Fourteenth District.

**DEAN W. MYERS, M.D. (Washtenaw):** Before I proceed to this nomination I would like to state to this Society that I appreciate,

more than my English will permit me to express, the honor that you have conferred upon me in making me your Councilor, which position I have held for the past seven years. I am withdrawing voluntarily from The Council, and I have the name of a man to present who I think will give you a fine administration.

He will bring to The Council a spontaneity, a knowledge of the affairs of the State Society, a loyalty that is not exceeded by any others. It will bring to The Council a man of whom you are all very fond, I know. I don't want to take any more of your time. I wish to present the name of Dr. John S. DeTar, of Milan.

(Vice Speaker Baker resumed the chair.)

**R. W. TEED, M.D.:** Mr. Chairman, on behalf of the delegates from Washtenaw, Livingston, Monroe and Lenawee I would like to second this nomination.

**VICE SPEAKER BAKER:** You have heard the nomination of Dr. DeTar for the Fourteenth District. Are there any other nominations?

**R. A. SPRINGER, M.D.:** Mr. Chairman, I move that the nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. DeTar.

**R. W. TEED, M.D.:** I second the motion.

The motion was put to a vote and was carried.

**CHAIRMAN BAKER:** Dr. DeTar, you are now Councilor—but you are still the Speaker. Will you step back to the rostrum?

(The Speaker resumed the Chair.)

**THE SPEAKER:** Gentlemen, I don't know how to thank you, but I assure you it won't be long before I will have only one position.

The job of Councilor carries with it many responsibilities, and I assure you that I will do my best to enforce those responsibilities and carry them out.

### XIV—b. COUNCILOR 18th DISTRICT

Next is the election of a Councilor for the Eighteenth District. Dr. William Bromme, of Detroit, is the incumbent. Nominations are now open for Councilor of the 18th District.

**R. V. WALKER, M.D.:** Mr. Speaker, it is my pleasure to nominate a man who only recently has become a member of The Council, whose term expires, and who I am sure will prove to be of great value to The Council if he can succeed himself.

I nominate Dr. William Bromme.

**THE SPEAKER:** Are there other nominations?

**J. A. WITTER, M.D.:** I move that nominations be closed and that the Secretary cast the unanimous ballot.

**ARCH WALLS, M.D. (Wayne):** I second the motion.

**R. A. JOHNSON, M.D.:** Mr. Speaker, I move that on Dr. Bromme's nomination we incorporate the words “for a five-year term.” The motion was severally seconded.

**THE SPEAKER:** The Chair will recognize a motion, and this motion will take priority over the nomination, in order to keep the record straight.

The motion before the House is that the nomination is effective for a five-year term.

The motion was put to a vote and was carried.

**THE SPEAKER:** Nominations are still open for Councilor from Wayne County for a five-year term. Dr. William Bromme has been nominated.

A motion that nominations be closed was severally seconded.

The motion was put to a vote and was carried.

### XIV—c. DELEGATES TO AMA

Nominations are now declared open for delegates to the American Medical Association. According to the Constitution which was adopted last year, any number of nominations may be made from the floor of the House for the number of delegates to be elected. This year there are three delegates to be elected to take the places of Dr. L. G. Christian of Lansing, incumbent; Dr. W. A. Hyland, of Grand Rapids, incumbent, and Dr. T. K. Gruber, deceased.

**H. W. WILEY, M.D. (Ingham):** It is my privilege as a member of the Ingham County Medical County delegation to place in nomination a man who has served our County and this State Society well for many years. He is a Past President of the Ingham County Medical Society, a delegate to the American Medical Association from this State Society for several years, and at the present time since the death of our beloved Thomas Gruber, the senior member of the delegation to the American Medical Association.

For ten years he has been a member of the Social Welfare Commission of the State of Michigan, and at the present time is its Chairman. I should like to place in nomination the name of Leo G. Christian of Ingham.

**W. D. BARRETT, M.D.:** Mr. Speaker a point of order: Dr. Gruber's term would have been one year from now. I think we are electing two, and electing one for an unexpired term.

**THE SPEAKER:** Dr. Foster is looking up the point right now. Thank you very much, Dr. Barrett. Apparently we are electing two delegates for a full term, and one delegate for a one-year unexpired term.

The Constitution indicates that the delegates will be selected in accordance with the number of votes cast, so in all probability we will vote on all of them at once. We are not voting on anyone to replace Dr. Gruber; we are voting on delegates to the American Medical Association. We will have a ruling on that from the Secretary very shortly.

The name of Dr. Christian has been recorded as a nominee.

Dr. Foster has found the ruling. There is some question as to whether, according to the new Constitution, the man receiving the third highest number of votes will serve out the unexpired term of Dr. Gruber. Dr. Foster is now looking that up.

The Chair would like to read from the new Constitution the ruling on the election of delegates, on page 127 in your Handbook:



"At each annual election, candidates for delegates to the House of Delegates of the American Medical Association shall be nominated in number equal to or greater than the number to be elected that year. Election shall be by ballot. The required number of high candidates shall be declared elected."

That is all there is in the Constitution. There is nothing in the Constitution to handle the problem of electing a delegate for an unexpired term. Therefore, the Chair will declare this procedure to be followed, if it is agreeable with the House:

We will make nominations for the two terms which are expiring this year, to succeed Dr. Christian and Dr. Hyland. After that election is held we will hold an election for a man to succeed Dr. Gruber for a one-year unexpired term, unless you prefer to hold the election all at once and have the first and second highest take the full terms and the third man take the unexpired term.

What are the wishes of the House?

E. D. SPALDING, M.D.: Mr. Speaker, I move that the House sustain the decision of the Chair.

R. S. BREAKEY, M.D.: Second the motion.

The motion was put to a vote and was carried.

THE SPEAKER: The Chair will then decide that we will hold an election for the two men who will be elected for the two full terms, and thereafter will elect a man for the unexpired term of Dr. Gruber.

Nominations are now open for the two full terms for delegates to the American Medical Association.

W. B. MITCHELL, M.D.: Mr. Speaker and members of the House of Delegates, I would like to make the nomination of a man who has been in the office and has carried on as delegate from Michigan.

I would like to nominate William A. Hyland, M.D., to succeed himself as delegate to the American Medical Association.

THE SPEAKER: Dr. Hyland has been nominated. Are there any other nominations?

P. L. LEDWIDGE, M.D.: I would like to second that nomination.

T. J. KANE, M.D. (Muskegon): Mr. Speaker, inasmuch as I understand the decision of the Chair is to vote for the two nominees for the full terms first, rather than by the other method once suggested, and there having been two nominations made, I should like to move that the nominations be closed.

The motion was severally seconded, was put to a vote, and was carried.

THE SPEAKER: The Chair will direct the Secretary to cast a unanimous ballot for the two nominees.

The Chair will now declare nominations in order for the position of delegate to the American Medical Association to replace Dr. Thomas K. Gruber, deceased, for the unexpired term of one year.

GROVER C. PENBERTHY, M.D. (Wayne): Mr. Speaker and members of the House of Delegates, it is hardly necessary for me to enter this candidate before you, but I wish to make mention of the fact that the delegates from Michigan have always sent strong delegates to the AMA. They include in our present group Drs. Hirschman, Luce, Reeder, and our deceased member, Dr. Gruber, to mention only a few.

It is important that we maintain a high standard of delegate. Our present delegates to the AMA are outstanding in their activities pertaining to the work of the AMA. I have not been a delegate from the State of Michigan, but for some eight years I worked with the delegates from the State of Michigan as a representative from the Section on Surgery, and I wish at this time to place in nomination an individual you all know and whom I am sure you all respect, none other than Dr. Robert L. Novy.

We are at a point in medical history where the good advice and the good counsel of one such as Dr. Novy will be very valuable not only for the State of Michigan but for the United States.

It is a great pleasure and privilege to have this opportunity to present the name of Dr. Robert L. Novy to succeed our beloved deceased member, Thomas K. Gruber.

THE SPEAKER: Dr. Novy has been nominated. Are there further nominations?

W. D. BARRETT, M.D.: I would like to support the nomination of Dr. Novy.

J. D. VAN SCHOICK, M.D. (Jackson): I would like to move that the nominations be closed and that the unanimous ballot be cast for Dr. Novy.

R. A. SPRINGER, M.D.: Second the motion.

The motion was put to a vote and was carried.

#### XIV—d. ALTERNATE DELEGATES TO AMA

THE SPEAKER: We will open nominations for alternate delegates to the American Medical Association.

The alternate delegates to the AMA are Dr. R. A. Johnson, of Detroit, incumbent, and Dr. H. H. Cummings of Ann Arbor, incumbent.

E. D. SPALDING, M.D.: Mr. Speaker, I would like to place in nomination for alternate delegate to the AMA the name of Dr. Clarence L. Candler, recently elected treasurer of the Wayne County Medical Society.

W. D. BARRETT, M.D.: I would like to place in nomination the name of Dr. Elmer Texter, of Wayne.

THE SPEAKER: Are there other nominations? We have two alternate delegates nominated.

THE SPEAKER: We have two full terms of two years for election, and one unexpired term of one year. Therefore, if it is agreeable with the House, the Chair will declare nominations open. We have had two nominations, Dr. Candler and Dr. Texter, for the two two-year terms. We will leave the one one-year unexpired term for the nominations later.

R. S. BREAKEY, M.D.: Mr. Speaker, I should like to submit in nomination the name of Dr. Ralph Johnson, who has served as an alternate over a period of several years, to succeed himself.

R. A. JOHNSON, M.D.: Mr. Speaker, I would like to take my name off as a candidate. I will quote you General Sherman's remark: "If nominated, I will not run. If elected, I will not serve."

THE SPEAKER: A man like Dr. Johnson appears rather definite. The Chair has no alternative except to withdraw the name of Dr. Johnson.

R. W. TEED, M.D.: Mr. Chairman, I would like to submit the name of Dr. H. H. Cummings for nomination as alternate.

THE SPEAKER: The name of Dr. H. H. Cummings has been submitted. We are voting on two positions and we have three nominees. Are there any other nominations?

T. J. KANE, M.D. (Muskegon): I would like to move that nominations be closed.

R. A. SPRINGER, M.D.: Second the motion.

The motion was put to a vote and was carried.

THE SPEAKER: The Chair will now appoint the tellers: Dr. Walter S. Stinson, Chairman; Dr. Springer, Dr. Walls, Dr. Breakey, Dr. Loupee and Dr. Lightbody. Will you please pass the ballots?

You are voting on the names of Drs. Candler, Texter and Cummings. Please vote for two. The two highest will be selected as alternates to the American Medical Association. Please put both names on one ballot.

(Balloting.)

#### XV. WILFRID HAUGHEY, M.D., BATTLE CREEK, "PRESIDENT FOR A DAY"

THE SPEAKER: While you are voting, gentlemen, the House of Delegates has elected one member of the Michigan State Medical Society to an honorary position as "President For A Day," which is to be Wednesday, Sept. 21, 1949. I should like to ask Dr. Wilfrid Haughey to come and sit with us, because he is President of the Michigan State Medical Society for a day.

(The audience arose and applauded.)

THE SPEAKER: While we are counting the ballots I would like to call a man to this platform who was Speaker of the House of Delegates from 1942 to 1946, a five-year term. He was President-elect in 1947; he was President in 1948, and now he is Past President but he is not consigned to the limbo of the dead. This man has been a rock of Gibraltar on The Council and the Executive Committee. He has been a wheel horse of labor, for organized medicine for many years. For instance, he has been Chairman of the Committee to Study the Health Plans; he has been on the committee which wrote the present Constitution; he has been Chairman of the Committee to Study the Basic Science and the Medical Practice Act. He has been on the Board of Michigan Medical Service for many years. He has been chairman of the committee which definitely solved the problem of the non-participation of some very important hospitals in Michigan Medical Service.

The Michigan State Medical Society would not be what it is today if it had not been for the services of one of our Past Speakers, P. L. Ledwidge, M.D., and I want him to come up here and sit down with us.

The audience arose and applauded.

THE SPEAKER: Pat doesn't talk much, but I am going to ask him to say just a word.

P. L. LEDWIDGE, M.D.: May I say two? Thank you.

THE SPEAKER: Are the tellers ready? You know, last year or the year before we introduced several of the Past Presidents. With the number of new delegates we have here who have not met some of our older officers, I think it would be most interesting if they did.

I would consider it so if I were in my first year in the House of Delegates, and so I want to call another of the older men (and I am not dealing in Past Presidents now), a past Speaker of the House. Is Phil A. Riley, M.D., here? Well, Phil Riley isn't here, but I have a man of approximately the same shape but of a few more years.

I want to ask one of our Past Speakers to come to the platform. He was Speaker of this House a long time ago—about the time some of our delegates were getting out of high school. I believe it was in 1936-37. He was delegate to this Society in the House of Delegates for thirty years. He was delegate to the American Medical Association for eleven years, and he has never missed a session of the House of Delegates of the Michigan State Medical Society in the last thirty years—and that's a remarkable record, gentlemen.

This man's hobby has been parliamentary law. He was Sergeant-at-Arms of the House of Delegates of the American Medical Association for ten years. Not only that, but his main claim to fame was that he was brought to the University of Michigan by Coach Yost, and at one time he roomed with Branch Rickey. I want former Speaker T. E. Reeder, M.D., to come to the platform.

F. E. REEDER, M.D. (Genesee): Mr. Speaker, thirteen years ago I was appointed Sergeant-at-Arms, and with your permission I would like to have J. J. O'Meara, M.D., escort me there.

The audience arose and applauded.

THE SPEAKER: Dr. O'Meara, will you please come forward? For many, many years, Dr. J. J. O'Meara of Jackson has been Chairman of the Credentials Committee. Dr. O'Meara, will you please come over here.

You have been up here so many times before, and tried to say 40 and 50 per cent and never got them right—why, it's been years and years! But for many years Dr. O'Meara has fulfilled that position. Dr. O'Meara said he would be glad to come to the House today if he had a suitable badge. It is certainly against the rules of the Michigan State Medical Society to have anyone who is not strictly a delegate, here; however, we have arranged for a suitable badge.

Dr. O'Meara is going to tell us what a quorum consists of.

J. J. O'MEARA, M.D. (Jackson): Mr. Speaker, I am J. J. O'Meara of Jackson, the ex-Chairman of your Credentials Committee. I have here in my hand the names of fifty-odd delegates who are represented in this room. This of course consists of a quorum, 50 per cent of whom aren't from any County. Mr. Chairman, you may now proceed with your meeting, and it will be legal. Thank you.



W. S. STINSON, M.D. (Bay-Arenac-Iosco): Mr. Speaker, Dr. Cummings has the greatest number of ballots and Dr. Texter is second. Dr. Cummings and Dr. Texter therefore are selected for your alternate delegates.

THE SPEAKER: The Chair will then declare that Dr. Cummings and Dr. Texter have been elected as alternate delegates to the American Medical Association for a two-year term.

The next order of business is the election of an alternate delegate to fill the one-year unexpired term.

R. L. NOVY, M.D.: Mr. Speaker, I would like to place in nomination a man who is energetic, capable, able to think, able to express himself, and who can express himself in very sharp, short terms. I also have in mind a general who did not care to run for President, but if drafted and forced to do so would serve his country.

I place in nomination the name of Dr. Ralph Johnson, and therewith request that he be drafted.

THE SPEAKER: Ralph Johnson has been nominated. Are there any other nominations?

R. S. BREAKEY, M.D.: I should like the privilege of seconding the nomination of Dr. Johnson.

E. G. KREIG, M.D. (Wayne): I should like to move that nominations be closed.

The motion was severally seconded, was put to a vote, and was carried.

THE SPEAKER: The Chair will instruct the Secretary to cast the ballot for Dr. Johnson. Will Dr. Johnson please come to the platform? Dr. Johnson is a master of the English language, but for once we are not going to ask him to say anything.

#### XIV—e. ELECTION OF PRESIDENT-ELECT

The next order of business is the election of a President-elect. The Chair will declare nominations open for the office of President-elect.

ARCH WALLS, M.D.: Mr. Speaker and members of the House of Delegates, it is indeed a pleasure and a privilege to introduce a man who perhaps needs no introduction to any of you, but who can fulfill the qualifications for the Presidency of the Michigan State Medical Society.

This office requires many qualifications of that individual. This man, I am sure, can fulfill all of those qualifications. He has been active in organized medicine for over thirteen years. He was elected Secretary of our County Medical Society about thirteen years ago. From there he was elected President of the County Society. Then he was elected to the Board of Trustees, which he served for five years. From there he was elected as Councilor to your State Medical Society, which he has served and served well for the remainder of those years.

This office gives high honor to that man. I feel he is deserving of that high honor. He has the integrity that we expect of our President of the Michigan State Medical Society. He also has the ability to carry out the duties which are imposed upon that individual.

Without further remarks I wish to present the name of Dr. Clarence E. Umphrey for your next President-elect of the Michigan State Medical Society.

THE SPEAKER: Dr. Clarence Umphrey has been nominated to the position of President-elect. Are there other nominations?

C. K. STROUP, M.D.: I would like to second the nomination of Dr. Clarence E. Umphrey.

THE SPEAKER: Are there any other nominations?

R. W. TEED, M.D.: I move that nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Umphrey.

The motion was severally seconded, was put to a vote, and was carried.

THE SPEAKER: The Chair will appoint Dr. Candler and Dr. Breakey to bring the President-elect to the platform. Gentlemen, your President-elect!

(The audience arose and applauded.)

C. E. UMPHREY, M.D.: Tonight I wish to thank you for the great honor that you have conferred upon me. At the same time I am fully aware of the duties that you have conferred upon me. I would like to speak for just a moment about the element of chance in this particular office.

Had one of our members (who was beloved of all of us) lived, he would have been here in my stead. Had either one of two men been mentioned, one of them would have been here in my stead. In this great office there is still a great element of chance.

When I say that I am aware of the responsibilities, I believe I know whereof I speak. Someone said, "Are you afraid of those responsibilities?" I am not, and I'll tell you why: I have been with this organization long enough to know your executive office. I know Mr. Burns and I know the group he has surrounded himself with in that office. I am proud that he is with us and on our side.

I know your Secretary. I know the work he is capable of doing, and I know he has had many offers from other organizations. I am glad that he is on our side.

In your new C.A.P. program I know Mr. Brenneman, and for the committee who selected him I have nothing but praise. Have they selected a good program? I don't know; do you? I feel it is a good program. Many improvements have been installed and many more will be added.

In that connection, I also feel that the American Medical Association has an excellent program which should be supported by all of us. I know the members of The Council, and I wish to say to you now that any officer you select may have ideas, but when they get through advising him those ideas are usually pretty good; so don't you worry too much.

There are going to be many problems brought to us for consideration and discussion. They are going to need a lot of thought, and if you do not give us your thought, you are to blame. Your thought and your help has been solicited. About one year from now I will be supposed to submit a list of committees. Let's suggest some

new names for those committees. Let's use the old guard in an advisory capacity.

If you will do those things, then again I wish to thank you, and I have no trepidation for what is ahead of me.

#### XIV—f. SPEAKER OF HOUSE OF DELEGATES

THE SPEAKER: The Chair will now open nominations for the position of Speaker of the House of Delegates. Nominations are now open for the position of Speaker of the House of Delegates.

H. A. FURLONG, M.D.: Mr. Speaker and members of the House of Delegates, it is an honor and a privilege for the Oakland County delegation to place in nomination for the office of Speaker of the House of Delegates one of its most respected members.

Perhaps first of all we should express our appreciation to Bay County for having sent our colleague to Oakland County twenty-nine years ago, for it was in Bay County that he was sired, educated and, under the tutelage of his physician father, took up the responsibilities of a practitioner of our profession.

He had a good start in the work that he has done for organized medicine, because in 1919, thirty years ago, his father was President of the Michigan State Medical Society. During the twenty-nine years he has been with us in Oakland County he has held every position that our County Society could give him. He was President in 1932. He has always been active in all those things that have had to do with the welfare of organized medicine locally.

We have come to look upon his work as a staff member of our hospitals as very valuable. We have turned to him constantly for advice and leadership.

He has been a delegate to this House of Delegates intermittently since 1924. For seven years he has been on the Board of Directors of Michigan Medical Service, and for the past three years he has been ably serving this House as Vice Speaker.

Therefore, it is with a great deal of pleasure, and with honor to our own County Society, that we place in nomination for Speaker of the House of Delegates, Dr. Robert Baker.

THE SPEAKER: Dr. Robert Baker has been nominated.

M. A. DARLING, M.D. (Wayne): I would like the pleasure of seconding the nomination of Dr. Baker.

THE SPEAKER: Are there any other nominations for the position of Speaker of the House?

S. L. LOUPEE, M.D.: Mr. Speaker, I move that nominations be closed.

GROVER C. PENBERTHY, M.D.: Second the motion.

The motion was put to a vote and was carried.

THE SPEAKER: The Chair will direct the Secretary to cast a ballot for Dr. Robert Baker as Speaker of the House. He is elected unanimously. Dr. Baker, I should like to shake your hand.

I should also like to pin on Dr. Baker this very beautiful speaker's badge about which I have worried for three years. Dr. Baker says he will make plenty of speeches next year.

Before we finish, there are three very important gentlemen in this group who also have represented us and will represent us at the American Medical Association. I should like to call to the platform Dr. Barrett, Dr. Penberthy and Dr. Huron, who are our other three delegates to the AMA. Gentlemen, will you come up and sit with us?

You know, when I started inviting notables up here I had no idea how many there were!

#### XIV—g. VICE SPEAKER OF HOUSE OF DELEGATES

The next order on the agenda is the election of a Vice Speaker of the House of Delegates. The Chair will declare nominations in order for Vice Speaker.

J. J. LIGHTBODY, M.D.: Mr. Speaker and members of the House, I would like to place in nomination as Vice Speaker of the House of Delegates one of the relatively young men of the House. He has been a delegate from Genesee County for the past four years. He is a graduate of the University of Iowa, but he didn't bring very much of the corn with him.

He is a radiologist, but he probably will outlive that. He was Editor of the *Genesee County Bulletin* for several years, and he is very well qualified for this position. He has been on several committees during the State meetings, and during the year has been on the Public Relations Committee and on the Industrial Health Committee.

I would like to place in nomination as Vice Speaker of the House of Delegates the name of Dr. J. E. Livesay, of Genesee County.

THE SPEAKER: Dr. Livesay has been nominated. Are there any other nominations?

F. W. BASKE, M.D.: I would like the privilege of seconding the nomination of Dr. Livesay.

R. W. TEED, M.D.: I move that nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Livesay.

The motion was severally seconded, was put to a vote, and was carried.

THE SPEAKER: The Secretary is instructed to cast the unanimous ballot for Dr. Livesay of Genesee County. Dr. Livesay, will you come up?

Dr. Livesay says "Thank you." We will hear from him probably for many years.

#### XIV—h. COUNCILOR 1st DISTRICT

Due to the election of Dr. Umphrey as President-elect, we now have one Councilorship in Wayne County that is open—the First District. It is for an unexpired term of two years. The Chair will declare nominations open to fill the vacancy of two years' unexpired term of Dr. Umphrey. Nominations are now in order.

F. A. WEISER, M.D. (Wayne): I am not going to give you a long rigamarole about this gentleman. He is a good friend of mine and a good friend of yours. He is a urologist, the Chief of Urology



at Grace Hospital. He is on the urological staff of Wayne University, and, more important than that, he was Chairman of the Public Relations Committee of the State Medical Society.

I would like to place in nomination Dr. L. W. Hull as Councilor of the First District for the unexpired term.

THE SPEAKER: Are there any other nominations?

G. C. PENBERTHY, M.D.: Mr. Speaker, I move that nominations be closed.

R. V. WALKER, M.D.: Second the motion.

The motion was put to a vote and was carried.

THE SPEAKER: Dr. Hull, will you try to find a chair up here?

Gentlemen, I believe our session is about to close. Certain recognitions should be made.

Dr. Foster has reminded me that Elmer C. Texter, M.D., the President of the American Academy of General Practice and our alternate delegate, is still sitting back there with ordinary people. Dr. Texter, you'd better come up here quickly!

E. C. TEXTER, M.D.: I still want to be "ordinary."

## XVI. THANKS OF SPEAKER DE TAR

THE SPEAKER: Gentlemen, I want to start this accolade with a recognition of the services of our Secretary. Dr. L. F. Foster has given an amount of time which is simply inconceivable this year and last year to the average man practicing medicine. Most of us simply can't see how he can do it and carry on the size of practice he does.

I think recognition should go to the Chairman of our Council, Dr. Otto O. Beck. He puts in a tremendous amount of time to that work. You will notice that this evening, in calling our various luminaries to the stage, I have centered on the Past Speakers of the House of Delegates and our representatives to the American Medical Association. I purposely left out the President and the President-elect because, after all, their night is tomorrow night—I but I think we should give them a hand.

(The audience arose and applauded.)

THE SPEAKER: Before we close I would like to mention the names of Bill Burns and Bob Roney, his assistant, and Hugh Brenneman and Russell Staudacher, his assistant. Without those gentlemen the executive office simply could not have run. We have the finest Executive Director and the finest public relations man in the United States, and when the executives from other areas come here they give us this recognition.

I don't think we should leave out of recognition three women who do a great deal of our work—in fact, all of our work at the State Headquarters. Miss Schulte, who is on the platform; Miss Chapman, and Mrs. Betty Brown Linton. They do a tremendous amount of work and have done so for many years.

We have a new Councilor whom I don't believe we have introduced, Dr. H. B. Zemmer of Lapeer, who has been appointed to fill the unexpired term of Dr. DeGurse.

I would like to thank the chairmen of the reference committees this year, and all the men who worked on those committees, because they did a tremendous job. You will note that the work of the House of Delegates this year went along with fairly good dispatch. It is due to the work done in those committees.

This is my swan song, my last chance at you gentlemen. I would like to express to you my very, very sincere appreciation for the very splendid spirit of co-operation I have noted in my three years of service. There certainly has been a lack of any kind of obstructionism. I have failed to see what I heard I should look for—a difference of opinion between Wayne and our State, or the interests of Genesee, or the obstructionist tactics of Ingham. I was warned to be careful of Bob Breakey. He has been one of the finest supporters I have had, in his own inimitable way. I was told that Ed Spalding would hop up every few minutes with a parliamentary point. What he actually did was to come up here and help me out.

I haven't experienced any of the difficulties I had been warned about. If there has been any criticism, it has been constructive criticism. Dr. Breakey was the Chairman of the Resolutions Committee last year or the year before, and he was a tremendous help. Dr. Spalding has always been helping me out, either after the session or before the session or during the session. I hope the Speaker and the Vice Speaker will see fit to call on Dr. Spalding, because if they do they just won't go wrong.

I would like to thank some of the men who have helped me off the scenes: Dr. Barone and Dr. Ledwidge. I would like to thank men like Dr. Armstrong, who called my attention today to something that was an oversight. Those are all constructive criticisms, and I think it is that spirit of the House that makes this a progressive House.

Last of all, I would like to pay my unqualified respects to the one man in the House who, in my opinion in these three years of service, stands out in a unique position. He espouses the unpopular causes; he has vision beyond most of us; he had the vision of Michigan Medical Service. He has constructive planning, he has imagination probably ten years ahead of his time, and I would like to take my hat off to Dr. Ralph Pino.

Now, gentlemen, I want to thank you and say goodbye. I want to bid you adieu. I hope you will give your new Speaker and your new Vice Speaker the same support you have given me in the work of the Michigan State Medical Society. Thank you.

## XVII. COMMISSION ON HEALING ARTS

The House discussed one matter in Executive Session and instructed The Council to appoint a Commission on Healing Arts.

## XVIII. ADJOURNMENT

The meeting was adjourned *sine die* at ten o'clock.

## SICKLE-CELL ANEMIA

(Continued from Page 1486)

which depends on the inability of females with sickle-cell anemia to become pregnant and deliver live children who will survive. On the other hand, if a male and female with sickle-cell trait mate, it is quite likely that from this union will come a child with sickle-cell anemia.

Recently Neel (1949) has presented evidence in support of the hypothesis that sickle-cell anemia is due to the homozygous conditions for a gene which, when heterozygous, produces the sickle-cell trait. The kindred to which this patient belongs has been studied rather extensively by Neel in connection with the above-mentioned investigation, and the hematological findings will be presented in detail elsewhere.

This case further illustrates the futility of removing the spleen in cases of sickle-cell anemia. Splenectomy in this case had no effect either on the anemia or on the tendency towards sickling.

Other forms of therapy directed toward the stimulation of blood formation, such as liver extract, iron preparations, choline dihydrogen citrate, and high protein diets, apparently have little or no effect on the course of sickle-cell anemia. Whole blood transfusion is apparently the treatment of choice.

## Summary and Conclusion

The twenty-fifth published case of sickle-cell anemia complicated by pregnancy is reported.

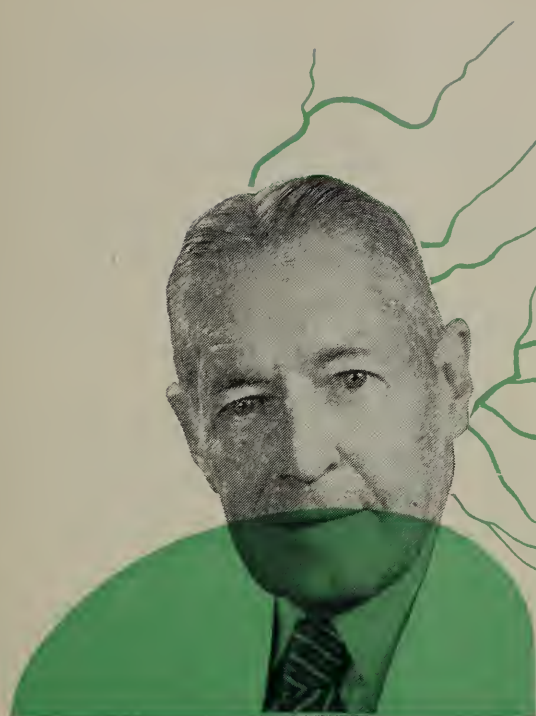
A family tree with studies for sickle-cell anemia and sickle-cell trait is presented.

It is suggested that eventually sickle-cell anemia may be bred out of the Negro race because of the inability of Negro females with sickle-cell anemia to become pregnant and deliver live children.

Splenectomy, iron preparations, liver extract and other stimulants toward blood forming are of no value in the treatment of sickle-cell anemia. Blood transfusion is the best form of supportive therapy.

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\*Werner, A. A.: The Climacteric in Women and Men, Postgrad. Med. 4:102 (Aug.) 1948.



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# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## TUBERCULOSIS X-RAY SURVEY

Mobile chest x-ray units of the Michigan Department of Health, offering free chest x-rays at thirty-two Michigan fairs and festivals this summer and fall, discovered 485 suspect cases of tuberculosis which otherwise might have gone undetected.

One suspect case was found for every 107 persons x-rayed. A total of 51,724 persons were x-rayed at the fairs and festivals. Of these 1,318 had abnormal chests. About two-thirds of these abnormalities were due to conditions other than tuberculosis—heart disease, pneumonia, silicosis, neoplasms and bone abnormalities.

A summary of the fairs surveyed in 1949 is shown in the accompanying table.

SUMMARY OF FAIRS SURVEYED—1949

<i>County Fairs</i>	<i>Total number x-rayed</i>	<i>Number with chest abnormalities</i>	<i>Number with reinfection tuberculosis</i>
Allegan County Fair, Allegan	4,168	57	27
Alpena County Fair, Alpena	2,157	64	16
Arenac County Fair, Standish	801	44	6
Barry County Fair, Bay City	1,386	43	8
Bay County Fair, Bay City	1,440	40	13
Blue Water Festival, Port Huron	1,617	46	26
Branch County Fair, Coldwater	2,828	67	17
Cass County Fair, Cassopolis	744	16	8
Clare County Fair, Harrison	800	8	6
Eaton County Fair, Charlotte	1,432	33	11
Gladwin County Fair, Gladwin	925	23	6
Hillsdale County Fair, Hillsdale	1,415	75	13
Iosco County Fair, Hale	1,002	23	15
Isabella County Fair, Mt. Pleasant	1,744	52	18
Jackson County Fair, Jackson	3,029	79	30
Lenawee County Fair, Adrian	2,937	75	27
Marine City Mardi Gras,			
Marine City	522	12	8
Mecosta County Fair, Big Rapids	867	54	9
Michigan State Fair, Detroit	3,417	74	42
Midland County Fair, Midland	2,468	41	14
Monroe County Fair, Monroe	1,349	50	17
Northern Michigan Fair,			
Cheboygan	1,018	27	10
Oceana County Fair, Hart	1,183	30	11
Ogemaw County Fair,			
West Branch	1,172	21	10
Ottawa County Fair,			
Hudsonville	555	8	5
Saginaw County Fair, Saginaw	2,357	63	25
St. Joseph County Fair,			
Centreville	1,086	40	16
Sanilac County Fair, Sandusky	1,088	33	10
Shiawassee County Fair, Corunna	1,120	28	13
Upper Peninsula State Fair,			
Escanaba	2,667	48	26
Western Michigan Fair,			
Ludington	2,106	30	18
Wexford County Fair, Cadillac	324	14	4
TOTAL	51,724	1,318	485

\* \* \*

The Division of Industrial Health is testing x-ray equipment in the eleven state hospitals to assure that no radiation hazards exist.

\* \* \*

The Michigan Department of Health has received report of house-to-house pamphlet salesmen who say that they represent the Department. The Department has no house-to-house or other salesmen. Those representing themselves as salesmen for the Department should be reported to the local health department or State Health Department at once.

The United States Children's Bureau now has reprinted reports of a series of surveys of the nutritional status of children in Michigan institutions which were conducted by the Research Laboratories of the Children's Fund of Michigan. The reports were originally published in the Journal of the American Dietetic Association (1948). The reprints are available from the United States Children's Bureau, Washington, D. C.

\* \* \*

Through the co-operation of the local health departments in the Michigan Vision Conservation Program, the sight of more than 67,000 Michigan school children was tested last year. One out of every five had some vision defect.

\* \* \*

Judging from figures prepared by the United States Public Health Service, there are probably 640,000 Michigan people infected with Brucellosis and about 6,400 of these are clinically ill of the disease.

How few of these people know they are ill or have been to their physicians for examination is shown by the fact that only 163 cases of the disease have been reported so far this year and only 998 cases have been reported in the past five years.

\* \* \*

Three out of every 100 Michigan school children have some degree of hearing loss which needs attention, according to results of a six-year study conducted by the Hearing Conservation Program carried on by local health departments and the Michigan Department of Health. Of the 325,000 children whose hearing has been tested in the past six years, 3 per cent showed hearing loss and were advised to see their physicians. Of those who received medical treatment, 75 per cent improved, 50 per cent of these to normal hearing.

\* \* \*

Russell L. Johnson has been named Division Engineer in charge of the Northern Peninsula office of the Michigan Department of Health. In addition to his duties as sanitary engineer, Mr. Johnson will represent the Michigan Department of Health in the peninsula.

\* \* \*

Office nurses and other nurses who wish to become better acquainted with the services of the Michigan Rapid Treatment Center, Ann Arbor, may be given two- or three-day observation periods in the Center. Requests should be made through the local health department or to the Michigan Department of Health.

Planned by the Section of Nursing and the Division of Venereal Disease Control, the observation period for nurses provides an opportunity to become familiar with the Center, its personnel, its routine in examination, treatment and education. It also gives an opportunity

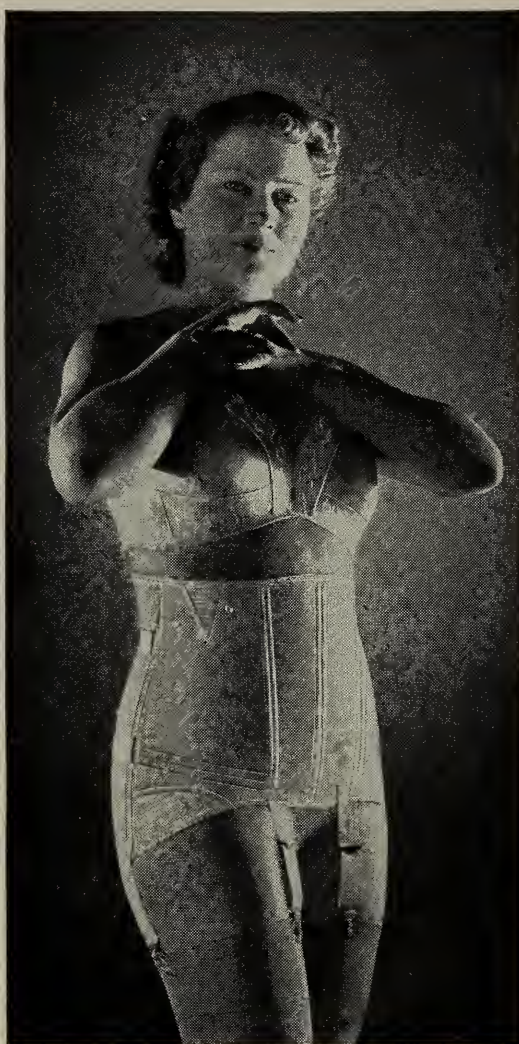
(Continued on Page 1534)

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of the Michigan State Medical Society

(Continued from Page 1532)

to sit in on contact interviews and to discuss problems of local follow-up.

\* \* \*

The Division of Disease Control on October 28, 1949, received the report of a case of poliomyelitis in Dearborn on October 25, 1939. The report, sent by a Dearborn physician, was addressed to the Michigan Poliomyelitis Commission.

\* \* \*

Dr. Alexander M. Campbell, former obstetrical consultant with the Michigan Department of Health who resigned in August, 1949, has resumed private practice in gynecology and obstetrics in Grand Rapids.

\* \* \*

The well-known "Pierre the Pelican Series" of letters on good principles of mental health in child care are being sent to all parents of first born children in a limited number of Michigan counties through the co-operation of the local health departments and the Michigan Department of Mental Health. The letters consist of twelve leaflets prepared by the Louisiana Society for Mental Health designed to be sent to parents, one a month, during the first year of the child's life.

\* \* \*

The Michigan Department of Health has received a grant of \$38,360.00 from the National Foundation of Infantile Paralysis under which the Division of Labora-

tories will investigate the role of hypertonic solutions in the treatment of poliomyelitis in monkeys.

\* \* \*

October visitors in the Department included public health people from India and Colombia.

Mohamed Sayed Ahmeed, Chief Administrator, Chest Disease Section, Ministry of Health, Cairo, Egypt, visited the Division of Tuberculosis and Venereal Disease Control.

Carlos Gomez, M.D., of Bogota, Colombia, a former student in the Department Laboratories, revisited the Laboratories before leaving for his native country.

\* \* \*

## DETROIT PHYSIOLOGICAL SOCIETY

(Continued from Page 1491)

eral vasomotor collapse occasionally encountered in the cirrhotic patient following the two rapid removal of ascitic fluid. Also, the increased quantities of circulating albumin following the paracenteses suggests that this protein or its immediate precursors is stored despite the presence of severe liver damage. Changes in the concentrations of the various serum proteins indicate that they should not be used for prognostic implications when obtained on the same day following the removal of ascitic fluid.



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Wilfrid Haughey, M.D.  
Editor, JOURNAL MSMS

Eloise, Michigan  
October 26, 1949

Dear Doctor Haughey:

This is to notify you of the first annual meeting of the Frederick A. Coller Surgical Society, which was held at the University Club, Chicago, October 19. This society is composed of former residents of Doctor Frederick A. Coller, Professor of Surgery, at University of Michigan. Fifty-nine former residents of Doctor Coller were present. The society contributes funds annually to Doctor Coller to provide for a traveling fellowship for residents of his department. The next meeting will be held in Boston during the annual session of the American College of Surgeons.

DARRELL A. CAMPBELL, M.D.  
*Surgical Director*  
Wayne County General Hospital  
Eloise, Michigan

\* \* \*

Wilfrid Haughey, M.D.  
Editor, JOURNAL MSMS

New York, N. Y.  
October 21, 1949

Dear Dr. Haughey:

Through the years, summer in the United States always has been marked by outbreaks of infantile paralysis. And every winter we have come to expect a successful fund-raising campaign to meet the needs of those affected.

The March of Dimes campaign, enthusiastically supported by magazines as well as by the press and radio in the past, has always raised enough to take care of the polio situation. In 1949, for example, although fewer than a hundred persons contributed more than a thousand dollars, the money rolled in . . . dimes from the millions, your readers!

However, this summer saw more than outbreaks of polio. There was widespread, nationwide epidemic, with more cases than ever before in our history. All resources of the National Foundation for Infantile Paralysis were pressed into service. The organization's epidemic treasury was emptied.

Now the bills for the epidemic's aftermath pile up—bills for the treatment of the crippled, those still in hospitals, those who must be rehabilitated, bills to be paid without curtailing the training of medical personnel and scientific research to find a preventive. But funds to pay all of these bills are lacking. And we have no way of knowing how many more cases there will be next year.

We face a possible crisis in polio that will menace every man, woman and child in the United States, unless, this winter, the March of Dimes takes in more money than ever before. Your readers must know the need. That is why I ask that you call the situation to your readers' attention.

The Editorial Committee of your National Association  
(Continued on Page 1538)

	Calories	Protein Gm.	Calcium Gm.	Copper mg.	Iron mg.	Phosphorus Gm.	Vitamin A I. U.	Thiamine mg.	Riboflavin mg.	Niacin mg.	Ascorbic Acid mg.	Vitamin D I. U.
National Research Council Allowances, Sedentary Man (154 lbs.)	2,400	70	1.0	1.2	12	1.5	5,000	1.2	1.8	12	75	Small Amount
Ovaltine in Milk, 3 Servings*	676	32	1.12	0.5	12	0.94	3,000	1.16	2.0	6.8	30	417
Percentages of N. R. C. Allowances Provided by 3 Servings* of Ovaltine in Milk	28%	46%	112%	42%	100%	63%	60%	97%	111%	57%	40%	Abun- dant

\* Each serving made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk.

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*(Continued from Page 1536)*

of Magazine Publishers has endorsed the 1950 March of Dimes. Won't you please remind your readers of the March of Dimes, if you can, somewhere in the issue you expect to circulate during the last two weeks of January, 1950?

Sincerely,  
BASIL O'CONNOR  
*President, National Foundation  
for Infantile Paralysis*

\* \* \*

New York, N. Y.  
November 4, 1949

To the Editor:

There have been many inquiries recently regarding the arrangements for covering the cost of care for poliomyelitis patients. There are a number of factors which will be of interest to your readers.

During 1949 a poliomyelitis incidence of unprecedented size (more than 37,000 stricken since January 1) has put serious financial strain upon the National Foundation for Infantile Paralysis. For the first time in its eleven-year history it was necessary to conduct a Polio Epidemic Emergency Drive which although very helpful did not entirely meet current needs.

In its avowed purpose to lead, direct and unify the national fight against infantile paralysis the National Foundation undertook support of research and education, for in these areas lie the ultimate hope for eradication of poliomyelitis. These programs are not to be compromised in any way.

The greatest cost to the National Foundation, however, is payment for medical care to patients. It is urgent for all physicians to assist in the institution of measures which will reduce costs without prejudice to patients. The chief costs are for hospitalization. Many poliomyelitis patients are hospitalized when they can be cared for at home at a reduced cost.

Our experience in this year's epidemic which has spared virtually no part of the country suggests the following:

1. Abortive, nonparalytic and mildly paralytic poliomyelitis patients are being hospitalized in the mistaken idea that the stated period of isolation must be spent in the hospital.

2. Overly prolonged hospitalization is frequent. This is particularly true of the paralytic patient who has achieved maximum improvement from daily physical therapy. Home care with periodic office or clinic visits is then in order.

3. There still exists in some places a general attitude that poliomyelitis is a bizarre disease which only a few physicians can manage. This is not so. It is disturbing, for example, to find physicians leaning so heavily upon the guidance of physical therapists and nurses. The physician's assessment of the total patient is the best index in determining when a patient shall leave hospital to receive home, office or clinic care.

4. Patients hospitalized on general ward services are

*(Continued on Page 1540)*

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(Continued from Page 1538)

not charged medical fees ordinarily. When patients are hospitalized on isolation wards for poliomyelitis, however, bills for medical fees are at times submitted. Payment is frequently made by the local chapters of the National Foundation whose treasuries are now generally depleted.

It is hoped that your readers will understand clearly how urgent is our need for co-operation from all practicing physicians in the matters mentioned above.

Sincerely yours,  
HART E. VAN RIPER, M.D.  
Medical Director, The National  
Foundation for Infantile  
Paralysis

\* \* \*

Wilfrid Haughey, M.D. Manistee, Michigan  
Editor, JOURNAL MSMS November 12, 1949  
Battle Creek, Michigan  
Dear Editor:

Enclosed find a copy of a letter I have just mailed regarding an article in your October Michigan State Medical Society JOURNAL.

Sincerely, yours,  
SAMUEL OSBORN, M.D.

November 12, 1949

Mr. Ed Adams  
Detroit Free Press  
Dear Sir:

Having just read your misleading comment in the October Michigan State Medical Society JOURNAL, I am

compelled to draw attention to your apparently intentional deletion of the other high costs of living today.

Why do you pick on medical and dental expenses when other fees and costs are so high, also? Which do you think is more important or essential to our way of life today—having a baby, or having the car bumped out and painted; having a few teeth extracted (others filled, etc.) or getting your auto engine tuned up with new spark plugs, points and other accessory parts? (Check these relative and nearly equal fees).

I don't know what your connection is with the *Free Press*, but anyone in the public eye and writing for public consumption should first of all try to tell the people the truth and more important, even, leave a truthful impression. In these times of expanding government expenditures (usually, of course, to influence the election results—and don't try to deny this) don't you think it is proper for you to help the public in its evaluation of big issues—such as Social Security, instead of doing as your letter indicates and just agreeing with the masses who, of course, are being led by greedy political aspirants to either power or money?

Why not admit that the dollar today isn't worth 50 cents of yesterday and when high medical costs are mentioned, why, instead of intimating that the only way out is by "Governmental Control," don't you suggest that the real solution is to elect some honest leaders for our City, County, State and Federal Governments and for them to begin balancing the budget and economizing so that we may again have a dollar that is worth 100 cents. It sounds like you are jumping on the well-known

(Continued on Page 1553)

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\*Kuhns, John G.: Changes in Elastic Adipose Tissue. J. Bone and Joint Surg., 31-A:541-547, July, 1949.



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## NEWS MEDICAL

### Michigan Authors

C. J. D. Z̄arafo<sup>n</sup>etis, M.D., Ann Arbor, published a paper, "Infectious Mononucleosis" in the *Journal-Lancet*, October, 1949.

Gerald D. Spero, M.D., Detroit, published a paper, "A New Shoestring Corneoscleral Suture," in *Archives of Ophthalmology*, 1949

\* \* \*

### Annual Session Echoes

E. C. Reifenstein, Jr., M.D., New York (Guest Essayist): "It was a pleasure for me to participate in the 84th Annual Session of the Michigan State Medical Society. The hospitality of your group leaves nothing to be desired. Thank you again for including me in the program."

John S. Lundy, M.D., Rochester, Minnesota (Guest Essayist): "I certainly enjoyed very much participating in the 84th Annual Session of the Michigan State Medical Society in Grand Rapids."

Nancy McKenna, National Foundation for Infantile Paralysis, New York (Scientific Exhibitor): "I am anxious to offer my praise for the excellent management of the MSMS Convention. Your idea on location of registration desk and meeting rooms and the traffic control system was most satisfactory. I enjoyed the experience and feel it was a most successful convention so far as we are concerned."

Alexander M. Campbell, M.D., Grand Rapids: "You put on a wonderful meeting in Grand Rapids. The program was timely, practical and scientific. It gives me pleasure to congratulate you on performing successfully on this difficult task requiring so many details."

\* \* \*

The Dietrich Ambulance Service has recently expanded its services with the announcement that they have taken over the ownership and operation of the Oxygen Therapy business of the Medical Gas Division of Liquid Carbonic Corporation. Dietrich will now supply physicians and hospitals through the Wayne County area with oxygen tents and complete oxygen therapy equipment. Rentals available at any hour of the day or night by telephoning UNiversity 2-6531.

\* \* \*

"Doctors' Outline—Manual of Rheumatic Fever" is the title of a booklet just released by the Rheumatic Fever Control Committee of the Michigan State Medical Society.

This Manual gives the essential points of diagnosis and

management and contains a brief bibliography and a table of heart murmurs as well as therapeutic and functional classifications.

Copies of the Manual are available, without cost, upon request to MSMS Rheumatic Fever Control Committee, 2020 Olds Tower, Lansing 8.

\* \* \*

Rheumatic Fever Control Center Chairmen, as appointed for the year 1949-50 by the county medical society in which the Center is located, are as follows (up to November 1, 1949):

Alpena .....	Harold Kessler, M.D.
Detroit .....	N. E. Clarke, M.D.
Grand Rapids .....	J. E. Webber, M.D.
Jackson .....	Frank Van Schoick, M.D.
Kalamazoo .....	H. S. Heersma, M.D.
Muskegon .....	DeVere R. Boyd, M.D.
Saginaw .....	David P. Gage, M.D.

\* \* \*

E. A. Pillsbury, M.D. of Frankenmuth recently was honored by his community for 46 years' service in that area. Dr. Pillsbury came to Frankenmuth in July, 1903, and for many years was the city's only physician. During his long service in Frankenmuth, he delivered over 2500 babies.

Pillsbury Day was one of the biggest days in the history of Frankenmuth.

Congratulations, Dr. Pillsbury, on a well-deserved honor at the hands of your patients and friends!

\* \* \*

E. C. Texter, M.D., Detroit, has been appointed Chairman of the Committee on Hotels for the fourth Annual Michigan Postgraduate Clinical Institute scheduled for the Book-Cadillac Hotel, Detroit, March 8-9-10, 1950.

The Press Relations Committee for the Postgraduate Institute is composed of R. A. Johnson, M.D., Detroit, Chairman, J. S. DeTar, M.D., Milan, H. F. Dibble, M.D., Detroit, and S. W. Donaldson, M.D., Ann Arbor.

P. L. Ledwidge, M.D., Detroit, is General Chairman of Arrangements.

\* \* \*

The Michigan Allergy Society will meet on Wednesday, January 18, 1950, with the Detroit Pediatric Society.

The program is as follows:

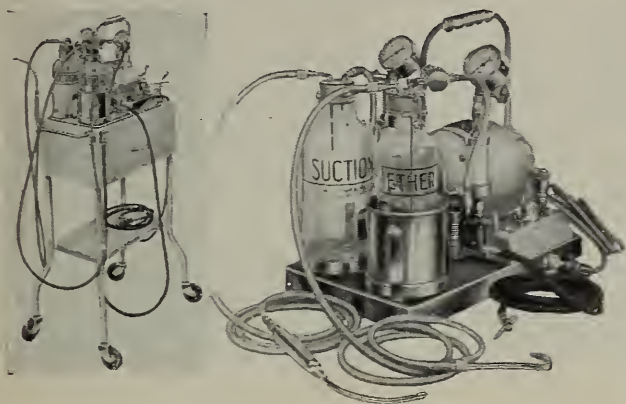
6 P.M. Cocktails, Huyler's L'Aiglon (Fisher Bldg.).  
7 P.M. Dinner, Huyler's L'Aiglon.

8:30 P.M. Jerome Glaser, M.D., Chief of Pediatric Allergy Clinic, Strong Memorial Hospital—Instructor in Pediatrics, University of Rochester School of Medicine

(Continued on Page 1544)

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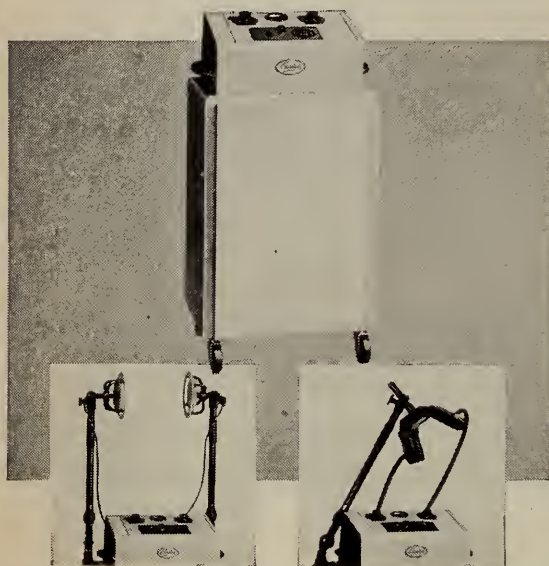
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(Continued from Page 1542)

and Dentistry—"The Diagnosis of Allergic Manifestations in Infancy and Childhood."

For reservations, communicate with Homer A. Howes, M.D., Secretary, Michigan Allergy Society, 1515 David Whitney Bldg., Detroit 26, Michigan.

\* \* \*

C. E. Umphrey, M.D., Detroit, President-Elect of the Michigan State Medical Society, has been selected General Chairman of Arrangements for the 1950 Annual Session of the Michigan State Medical Society to be held in Detroit on September 20-21-22, 1950.

Dr. Umphrey recently addressed the American Association of Physicians and Surgeons at its annual meeting held in Detroit on October 28. His subject was "Medicine, Legislation, Federal Security and Labor"; the MSMS President-Elect also spoke to the East Side Medical Society on November 3 on "The Place of the General Practitioner in the Michigan CAP Program"; he also addressed the Dearborn Medical Society on November 9, using as his subject "Your Part in the MSMS CAP Program."

\* \* \*

U. of M. Library.—A renewed invitation for all Michigan doctors of medicine to use the facilities available at the University of Michigan General Library has been received from Warner G. Rice, Director, and Sue Bietham Chief Medical Librarian.

The invitation has been repeated after consultation with H. H. Cummings, M.D., head of the Department of Postgraduate Medicine, Ann Arbor, who reports that "the University has a service adequate for the doctors of Michigan. Last year more than 400 Michigan doctors of medicine used the service with more than 1,000 volumes being loaned throughout the state."

Dr. Cummings added that "it seems entirely unnecessary for the Michigan State Medical Society to try and duplicate another medical library. It would take hundreds of thousands of dollars and years of work to duplicate what we already have in the University Medical Library. It may be that our doctors are not acquainted with the fact that the medical library is theirs and should be used by them."

\* \* \*

Harry E. August, M.D., Detroit, has been appointed to the State Mental Health Commission by the Governor. Congratulations, Dr. August!

\* \* \*

American College of Surgeons President F. A. Collier, M.D., of Ann Arbor conferred Fellowships on 923 initiates and five honorary Fellows at the ACS Clinical Congress in Chicago on October 21.

Michigan's Fellows included: James E. Bailey, Coldwater; Frederick W. Bald, Flint; Robert C. Bassett, Ann Arbor; Howard G. Benjamin, Grand Rapids; Duncan A. Cameron, Detroit; Daniel Carothers, Jr., Charlotte; Maynard M. Conrad, Kalamazoo; Paul F. Cooper, Kalamazoo.

(Continued on Page 1546)



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*(Continued from Page 1544)*

mazoo; Cyril R. DeFever, Grosse Pointe; Reed O. Dingman, Ann Arbor; James A. Ferguson, Grand Rapids; John M. Hammer, Kalamazoo; Bradley M. Harris, Ypsilanti; Harry N. Jurow, Detroit; F. Bruce Kimball, Port Huron; Walter G. King, Ann Arbor; Emil J. Lauretti, Muskegon; Don Marshall, Kalamazoo; Henry T. E. Munson, Detroit; Michael R. Murphy, Cadillac; Charles H. O'Donnell, Dearborn; Edmund J. Robson, Lansing; Donald V. Sargent, Saginaw; Benton A. Schiff, Flint; Edward J. Shumaker, Detroit; Carl J. Sprunk, Detroit; Ethelbert Spurrier, Detroit; John W. Strayer, Niles; Christopher J. Stringer, Lansing; Leland L. Swenson, Muskegon; Clarence E. Umphrey, Detroit; Howard R. Williams, Ann Arbor.

\* \* \*

*Members appointed to the Michigan State Board of Registration in Medicine*, as of October 1, 1949, were: E. W. Schnoor, M.D., Grand Rapids, and Luther Peck, M.D., Plymouth, both reappointments; new members included Howard H. McNeill, M.D., Pontiac; R. A. Sokolov, M.D., Detroit, and E. C. Swanson, M.D., Vassar. Terms are for five years each.

\* \* \*

*MSMS Council in Three-Day Session.*—The Council of the Michigan State Medical Society will hold its Annual Session in Detroit on January 19, 20, 21, 1950. The eighteen District Councilors plus the President, President-Elect, Secretary, Treasurer, Speaker and Vice

Speaker of the Society attend sessions of The Council.

A fourth day will be added to this sojourn in Detroit for attendance at the annual County Secretaries-Public Relations Conference, to be held at the Book-Cadillac Hotel, Detroit, on Sunday, January 22, 1950.

\* \* \*

*Alexander M. Campbell, M.D.*, Grand Rapids, resumed office practice as of October 1 in gynecology and obstetrics in the Metz Bldg of Grand Rapids.

\* \* \*

*The Indiana State Medical Association's* House of Delegates, on September 29, 1949, voted to increase the annual dues in the Association from \$15 to \$35 as of January 1, 1950—the increase to provide funds to finance a state-wide public relations campaign against socialized medicine.

\* \* \*

*The recently organized United Cerebral Palsy Association, Inc.*, has developed plans for a national cerebral palsy drive to be held in the spring of 1950. The budget for next year's drive totals one million thirty-four thousand dollars, to be used for training of personnel, research, expansion of treatment facilities, public education and community service.

\* \* \*

*A National Conference on Cardiovascular Diseases* will be held January 18-20, 1950, at the Mayflower Hotel, Washington, D. C., under the sponsorship of the American Heart Association and the National Heart Institute.

*(Continued on Page 1548)*

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Surgery of Colon and Rectum, one week, starting March 6.  
Esophageal Surgery, one week, starting June 5.  
Breast and Thyroid Surgery, one week, starting June 26.  
Thoracic Surgery, one week, starting June 12.  
Gallbladder Surgery, ten hours, starting June 19.  
Fractures and Traumatic Surgery, two weeks, starting April 17.

**GYNECOLOGY**—Intensive Course, two weeks, starting February 20. Vaginal Approach to Pelvic Surgery, one week, starting March 6.

**OBSTETRICS**—Intensive Course, two weeks, starting March 6.

**PEDIATRICS**—Intensive Course, two weeks, starting April 3.

**MEDICINE**—Intensive General Course, two weeks, starting April 24. Gastroscopy, two weeks, starting March 6.

**DERMATOLOGY**—Formal Course, two weeks, starting May 8. Informal Clinical Course every two weeks.

**ROENTGENOLOGY**—Diagnostic and Lecture Course first Monday of every month. Clinical Course third Monday of every month. X-Ray Therapy every two weeks.

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A. James DeNike, M.D., Medical Superintendent

(Continued from Page 1546)

Paul D. White, M.D., former President of the AHA, has been named Chairman of the Steering Committee of which Max R. Burnell, M.D., Detroit, is a member. The Conference will provide guideposts for a comprehensive and concrete program of action to correlate an all-out national attack on heart disease problems and will determine how professional and lay groups concerned with the heart diseases can best work together for the most effective use of their resources for the entire community.

\* \* \*

W. G. Gamble, Jr., M.D., Bay City, has been appointed to the Michigan Tuberculosis Sanatorium Commission. Dr. Gamble was appointed to fill the unexpired term of Bruce H. Douglas, M.D., on September 16, and on October 9 the Governor reappointed him for the full term of three years.

\* \* \*

The Annual County Secretaries-Public Relations Conference of the Michigan State Medical Society will be held at the Book-Cadillac Hotel on Sunday, January 22, 1950. Copy of the program will be sent to all county society officers and public relations committee chairmen.

\* \* \*

The Genesee County Medical Society held its first meeting of the year on September 27, 1949 with the Buick Motor Division, General Motors, as its host. After

(Continued on Page 1550)

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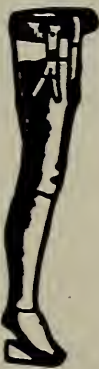
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a tour of the factory by 120 physicians, a reception and dinner was held in the Buick Auditorium. The scientific address was given by Grover C. Penberthy, M.D., Detroit, on "The Surgeon and his Relations to the Employer and Employee."

\* \* \*

E. C. Texter, M.D., Detroit, President of the American Academy of General Practice, addressed the American Association of Physicians and Surgeons at its annual session in Detroit, October 28. Dr. Texter's subject was "The Role of the General Practitioner Today."

\* \* \*

Joseph M. Croman, Jr., M.D., of Mt. Clemens recently forwarded a pledge for \$1,000 to the Michigan Foundation for Medical and Health Education, Inc. Dr. Croman's name has been added to the growing list of contributors to this fund, sponsored by the Michigan State Medical Society.

\* \* \*

Horace Wray Porter, M.D., Jackson, spoke on "What's Wrong with Socialized Medicine?" at the annual BIE Day of Jackson, on October 27.

\* \* \*

Nine hundred and fifty-seven applications for hospital projects now approved by United States. Up to October 1, a total of 957 project applications for federal aid under the Hill-Burton Hospital Construction Act have been approved by the Surgeon General of the USPHS. The recently approved congressional act (Public Law 380) will accelerate the federal-state expansion program at least 100%—this has been approved by President Truman. Leonard A. Scheele, M.D., Surgeon General, said special grants will be made to medical schools, regional hospital councils and other eligible applicants enabling them to add to their equipment, establish rotating internships, conduct refresher courses, provide for common utilization of facilities and adopt other measures designed to heighten efficiency of hospitals constructed with Hill-Burton aid.

\* \* \*

*Correction*—In the story entitled "Successful Cancer Conference" which appeared in the November JMSMS on page 1416, the name of A. A. Humphrey, M.D., Battle Creek, was inadvertently omitted as one of the speakers at the Conference held in Lansing on October 11.

Apologies, Dr. Humphrey!

\* \* \*

The Inter-Association Committee on Health has been formed by six national associations: the American Medical Association, the American Dental Association, the American Hospital Association, the American Nurses Association, the American Public Health Association, and the American Public Welfare Association.

The Inter-Association Committee on Health will serve as a means for the exchange of information on the health programs of the participating organizations to the end that a common understanding is reached to cause a solution of national health problems. Activities contributing to the major objectives of improving the health of the nation will be carried out.

(Continued on Page 1554)





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## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**CLINICAL BIOCHEMISTRY.** By Abraham Cantarow, M.D., Professor of Biochemistry, Jefferson Medical College, and Max Trumper, Ph.D., Commander, H(S)USNR, Lecturer in Clinical Biochemistry and Basic Science Co-ordinator, Naval Medical School, National Naval Medical Center. Fourth edition, 642 pages. Philadelphia: W. B. Saunders Company, 1949. Price \$8.00.

The current edition of this book apparently records all of the important changes made in clinical biochemistry in the four years which have elapsed since the previous edition. Noteworthy additions are new or revised chapters on liver disease and functional tests associated with it, goitrogenic agents, and tests for adrenocortical function. A table of normal values inserted on the back fly leaf and cover is a convenient and valuable innovation.

This book should be in the library of any physician who practices thoughtful and scientific medicine. It is easy to read and is concise. It provides a correlation between clinical laboratory tests and disease processes so that it is of equal interest to the surgeon, pathologist, and internist. Much of the material cannot be found collectively in any other source. A.A.H.

\* \* \*

**FRACTURES.** By Paul B. Magnuson, M.D., F.A.C.S. Professor of Bone and Joint Surgery and Chairman of the Department, Northwestern University Medical School; Attending Surgeon, Passavant Memorial Hospital and Wesley Memorial Hospital, Chicago and James K. Stack, A.B., M.D., F.A.C.S. Assistant Professor of Bone and Joint Surgery, Northwestern University Medical School; Attending Surgeon, Passavant Memorial Hospital and Cook County Hospital, Chicago. 323 Illustrations, Fifth edition, Philadelphia: J. B. Lippincott Co., 1949. Price, \$12.00.

The purpose of the authors has been to supply a reference "to meet the needs of the man who first sees the fracture." This purpose has been well accomplished in the new 5th Edition of "Fractures," by Magnuson and Stack. The early chapters cover fundamentals and bring out the importance of the knowledge of Physiology of bone repair, and the Pathology of Fractures is adequately covered. Traction and manipulative procedures are rightfully stressed over operative methods although in some instances the latter are described and the indications given. Each fracture is discussed individually and its treatment covered in an orderly and interesting manner.

The chapter on "Applied Anatomy of the Spinal

Column and Spinal Cord" is an especially important one and although this is not discussed in great detail, it is concise and to the point. "Farmyard" Treatment of Fractures" is a most interesting chapter and should be of great value to those practicing in areas where hospital facilities are not readily available.

The treatise is well written, generously illustrated and fills a very definite need for those who are treating fractures. P.C.K.

\* \* \*

**THE PHYSICIAN'S BUSINESS.** Practical and Economic Aspects of Medicine. George D. Wolf, M.D.; Assistant Clinical Professor of Otolaryngology, New York Medical College; Fellow New York Academy of Medicine; Fellow, American Medical Association. Foreword by Harold Rypins, A.B., M.D., F.A.C.S. Third edition. 96 Illustrations. Philadelphia, Montreal, London: J. B. Lippincott Company, 1949. Price, \$10.00.

The author has gone to great length to outline the ambitions, prospects, plan of life and mode of existence of the practitioner of medicine. The book is rather large and all-inclusive, and makes an excellent guide for the practitioner who has been in practice long enough to afford this book. We think the contents are comprehensive and true, giving necessary information for the young medical student who is getting ready to enter practice and needs advice and counsel. However, the book is too big for that purpose, and too expensive. It should be on the reading desk of every medical class, but that distribution would be too small to pay. The book, in our estimation, should have been published in two volumes: One small volume covering the questions the medical student and young graduate are vitally interested in; places to locate; hospitals for internship; types of internship; specialization; medical careers outside of medicine. The other subjects are more suitable for the man who has had some experience. The advice is good. We think the advocated fees are rather high in many instances. How to get along with other M.D.s is most important. This is a good book, well written, but it will not be purchased by the young man who needs some of it most vitally.

\* \* \*

**AN ATLAS OF THE BLOOD AND BONE MARROW.** By R. Philip Custer, M.D., Director, Laboratories of the Presbyterian Hospital, Philadelphia, Assistant Professor of Pathology, the University of Pennsylvania School of Medicine; Consultant to the Armed Forces Institute of Pathology. 321 pages, 285 illustrations, 42 in color. Philadelphia and London: W. B. Saunders Company, 1949. Price \$15.00.

There is no book dealing with hematology which is exactly like this work either in illustration or treatment



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of material. It rather pointedly ignores treatment except where it has some bearing on diagnosis and packs far more information in its unusual and excellent illustrations than it does in its text. The author, who has an excellent reputation as a pathologist, has presented an easily understood relationship between tissue sections and the hematological picture by well-chosen photomicrographs. The text suffers slightly from lack of uniformity in nomenclature although the writer has attempted to conform to recent changes.

A.A.H.

\* \* \*

**NEW GOULD MEDICAL DICTIONARY.** Editors: Harold Wellington Jones, M.D., Normand L. Koerr, M.D., and Arthur Osol, Ph.D.; First Edition, Illustrated. Philadelphia: The Blakiston Company. 1949. Price \$8.50, \$10.75 and \$13.50.

The New Gould is almost completely rewritten, based on the needs of our present times. There are over a hundred contributors. New terms and changed usage of old terms are given in the book. New reference material is used. Table of Vitamins, enzymes, antibiotics, arteries, nerves are in a section by themselves. There are 252 illustrations, 129 in color. It is an entirely new treatment of a medical dictionary, and makes for intelligent and easy usage.

\* \* \*

**FUNDAMENTALS OF OTOLARYNGOLOGY.** A Textbook of Ear, Nose and Throat Diseases: By Lawrence R. Boies, M.D., Clinical Professor of Otolaryngology, Director of Division of Otolaryngology, University of Minnesota Medical School, and Associates. 443 pages with 184 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$6.50.

Teaching of the undergraduate medical student is the foremost activation for this volume. It is beautifully

prepared, very exact in its teachings, avoiding all controversial subjects, and giving numerous illustrations of the methods and means of diagnosis and treatment. It provides fundamental information to the physician, who is not a specialist, but who is called upon to manage many cases in the field of otolaryngology. It also contains much that the specialist can refer to readily and quickly. The chapter on vertigo, for instance, is absolutely up to the minute, giving the latest thought on these subjects. The same holds for most other branches. A valuable book for the busy man.

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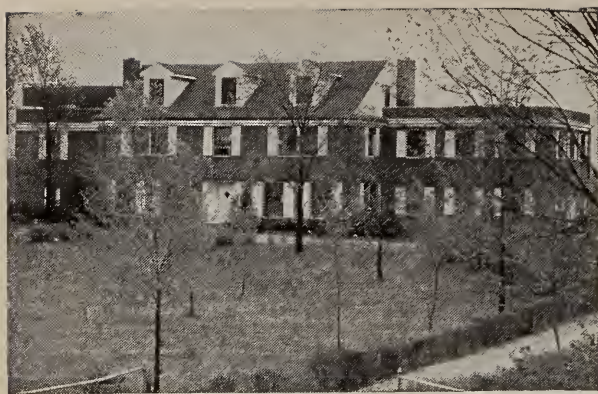
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## THE MICHIGAN HEART ASSOCIATION

(Continued from Page 1497)

Program, a project which is essentially educational in its scope and which has been actively under way for several years. Other educational activities are under consideration and study.

The Michigan Heart Association contributes toward the financial support of the American Heart Association. Fifty per cent of its contribution is definitely earmarked for research, the benefits of which will accrue to the people of Michigan.

Future success in this important field of medical endeavor depends on active support by the citizens of Michigan and upon the active participation and interest of each individual member of the medical profession.

W.B.C.

## NEWS MEDICAL

(Continued from Page 1550)

Otolaryngologists and other members of the Michigan State Medical Society are cordially invited by J. M. Sutherland, M.D., Detroit, Vice President of the Middle Section of the American Laryngological, Rhinological and Otological Society, Inc., to attend a two-day combined meeting of the Middle and Southern Sections at the Peabody Hotel in Memphis, Tennessee, January 16-17, 1950. Speakers include Clarence W. Engler, M.D., Cleveland; Spencer Braden, M.D., Cleveland; John R. Lindsay, M.D., Chicago; J. M. Robinson, M.D., Houston; Theodore E. Walsh, M.D., St. Louis; Mercer G. Lynch, M.D., New Orleans; G. S. Fitz-Hugh, M.D., Charlottesville, Virginia; R. E. Semmes, M.D., Memphis; J. W. McLaurin, M.D., Baton Rouge, Louisiana, and Charles E. Kenney, M.D., Cleveland.

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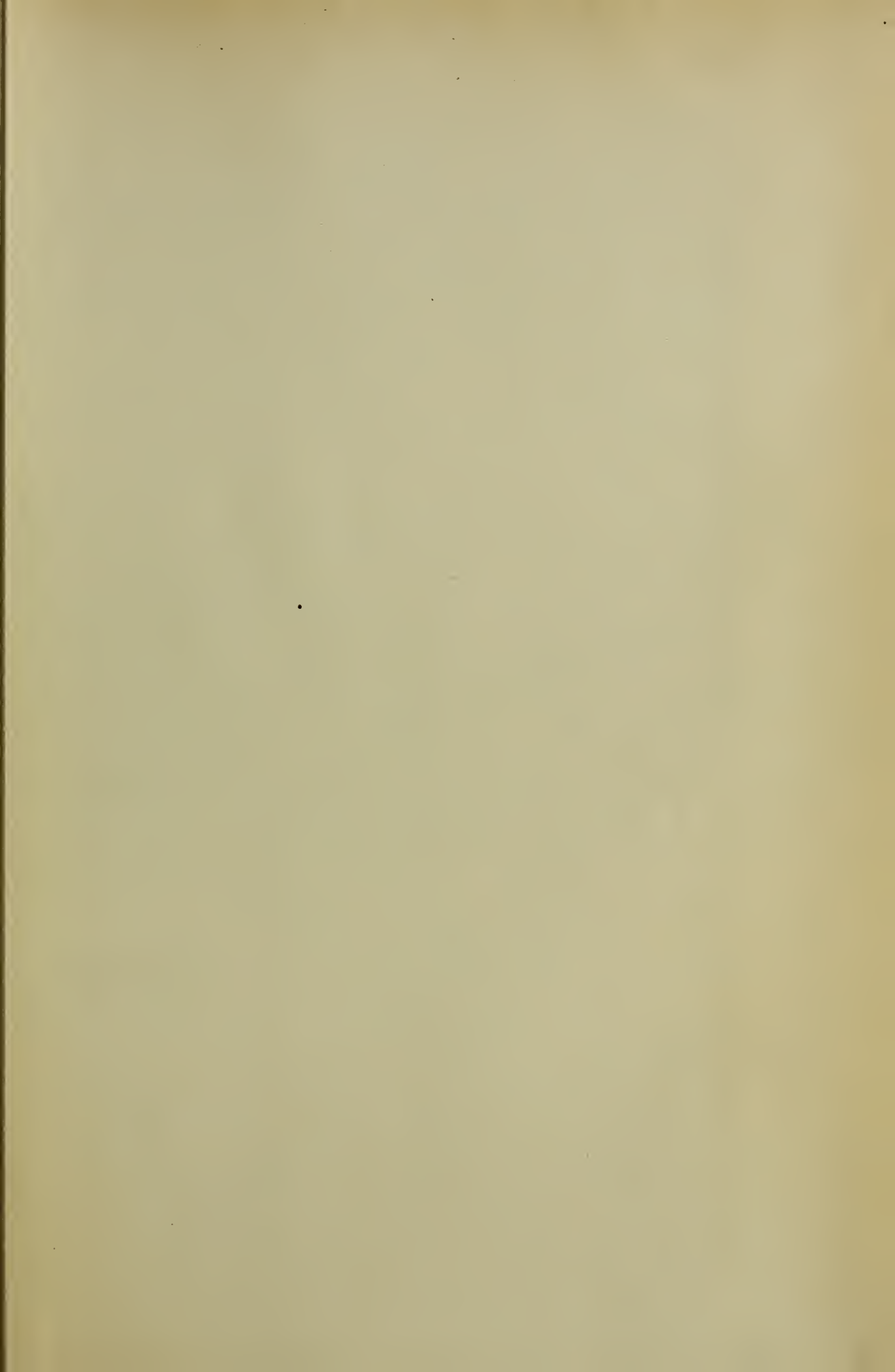
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